Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTAJMN1626

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

| | | | |
|---|---|---|---|
| NEWS | 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | MAY 01 | New CAS web site launched |
| NEWS | 3 | MAY 08 | CA/CAplus Indian patent publication number format defined |
| NEWS | 4 | MAY 14 | RDISCLOSURE on STN Easy enhanced with new search and display fields |
| NEWS | 5 | MAY 21 | BIOSIS reloaded and enhanced with archival data |
| NEWS | 6 | MAY 21 | TOXCENTER enhanced with BIOSIS reload |
| NEWS | 7 | MAY 21 | CA/CAplus enhanced with additional kind codes for German patents |
| NEWS | 8 | MAY 22 | CA/CAplus enhanced with IPC reclassification in Japanese patents |
| NEWS | 9 | JUN 27 | CA/CAplus enhanced with pre-1967 CAS Registry Numbers |
| NEWS | 10 | JUN 29 | STN Viewer now available |
| NEWS | 11 | JUN 29 | STN Express, Version 8.2, now available |
| NEWS | 12 | JUL 02 | LEMBASE coverage updated |
| NEWS | 13 | JUL 02 | LMEDLINE coverage updated |
| NEWS | 14 | JUL 02 | SCISEARCH enhanced with complete author names |
| NEWS | 15 | JUL 02 | CHEMCATS accession numbers revised |
| NEWS | 16 | JUL 02 | CA/CAplus enhanced with utility model patents from China |
| NEWS | 17 | JUL 16 | CAplus enhanced with French and German abstracts |
| NEWS | 18 | JUL 18 | CA/CAplus patent coverage enhanced |
| NEWS | 19 | JUL 26 | USPATFULL/USPAT2 enhanced with IPC reclassification |
| NEWS | 20 | JUL 30 | USGENE now available on STN |
| NEWS | 21 | AUG 06 | CAS REGISTRY enhanced with new experimental property tags |
| NEWS | 22 | AUG 06 | BEILSTEIN updated with new compounds |
| NEWS | 23 | AUG 06 | FSTA enhanced with new thesaurus edition |
| NEWS | 24 | AUG 13 | CA/CAplus enhanced with additional kind codes for granted patents |
| NEWS | 25 | AUG 20 | CA/CAplus enhanced with CAS indexing in pre-1907 records |
| NEWS | 26 | AUG 27 | Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB |
| NEWS | 27 | AUG 27 | USPATOLD now available on STN |
| NEWS | 28 | AUG 28 | CAS REGISTRY enhanced with additional experimental spectral property data |

NEWS EXPRESS 29 JUNE 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 05 JULY 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:49:07 ON 05 SEP 2007

=> fil reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|---|---|---|
| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'REGISTRY' ENTERED AT 11:49:20 ON 05 SEP 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.


Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2
DICTIONARY FILE UPDATES: 4 SEP 2007 HIGHEST RN 946048-22-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

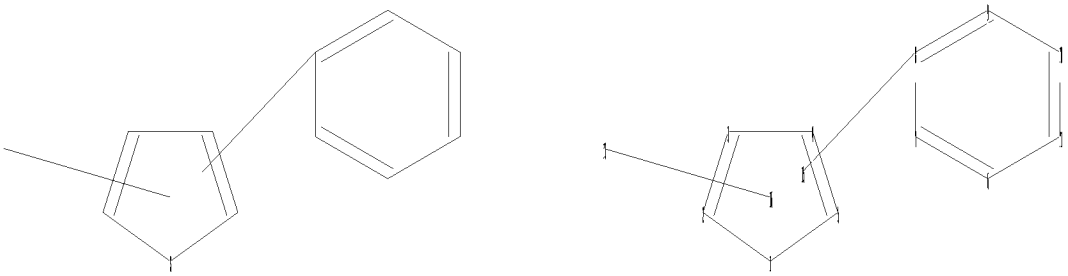
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\6.str



```
ring nodes :
1  2  3  4  5  6  7  8  9  10  11
ring/chain nodes :
13
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-11  7-8  8-9  9-10  10-11
exact bonds :
1-2  1-5  2-3  3-4  4-5
normalized bonds :
6-7  6-11  7-8  8-9  9-10  10-11
isolated ring systems :
containing 1 :

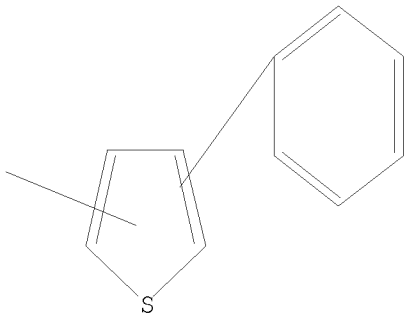

G1:Cb,Ak

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  13:CLASS  15:CLASS  16:Atom



L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1              STR
```




```
G1 Cb,Ak


Structure attributes must be viewed using STN Express query preparation.


=> s l1
SAMPLE SEARCH INITIATED 11:49:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    58873 TO ITERATE

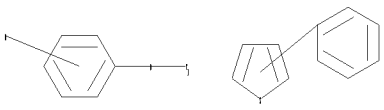
  3.4% PROCESSED     2000 ITERATIONS                                50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

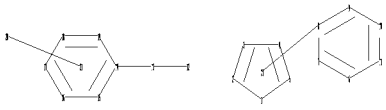
FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
```

BATCH **COMPLETE**
PROJECTED ITERATIONS: 1162995 TO 1191925
PROJECTED ANSWERS: 74549 TO 82053

L2 50 SEA SSS SAM L1

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\7.str





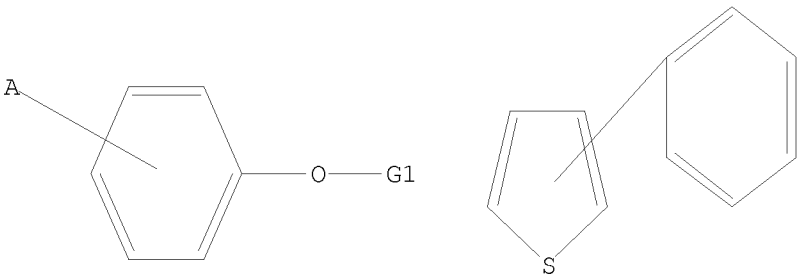
chain nodes :
12 13 20
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 14 15 16 17 18 19
chain bonds :
12-13 13-14
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 14-15 14-19 15-16
16-17 17-18 18-19
exact/norm bonds :
1-2 1-5 2-3 3-4 4-5 12-13 13-14
normalized bonds :
6-7 6-11 7-8 8-9 9-10 10-11 14-15 14-19 15-16 16-17 17-18 18-19

G1:Cb,Ak

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:CLASS 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:CLASS 21:Atom 23:Atom

L3 STRUCTURE UPLOADED

```
=> d
L3 HAS NO ANSWERS
L3              STR
```




G1 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

```
=> s l3
SAMPLE SEARCH INITIATED 11:51:21 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    36831 TO ITERATE

  5.4% PROCESSED     2000 ITERATIONS                              50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

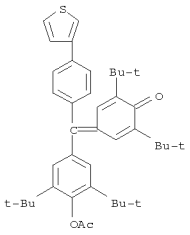
FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       725152 TO   748088
PROJECTED ANSWERS:           16945 TO    20621

L4           50 SEA SSS SAM L3

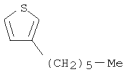
=> d scan
```

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 2,5-Cyclohexadien-1-one, 4-[[4-(acetyloxy)-3,5-bis(1,1-dimethylethyl)phenyl][4-(3-thienyl)phenyl]methylene]-2,6-bis(1,1-dimethylethyl)-, polymer with 3-hexylthiophene (9CI)
MF (C41 H50 O3 S . C10 H16 S)x
CI PMS

CM 1

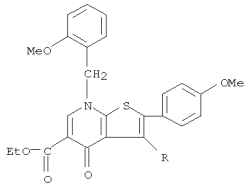


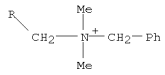
CM 2



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

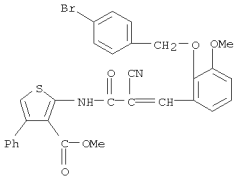
L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Thieno[2,3-b]pyridine-3-methanaminium, 5-(ethoxycarbonyl)-4,7-dihydro-2-(4-methoxyphenyl)-7-[(2-methoxyphenyl)methyl]-N,N-dimethyl-4-oxo-N-(phenylmethyl)- (9CI)
MF C35 H37 N2 O5 S
CI COM





HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

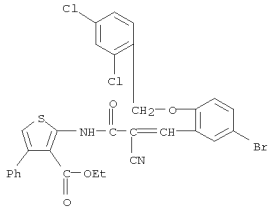
L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3-Thiophenecarboxylic acid, 2-[[3-[2-[(4-bromophenyl)methoxy]-3-methoxyphenyl]-2-cyano-1-oxo-2-propen-1-yl]amino]-4-phenyl-, methyl ester
MF C30 H23 Br N2 O5 S



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L4 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3-Thiophenecarboxylic acid, 2-[[3-[5-bromo-2-[(2,4-dichlorophenyl)methoxy]phenyl]-2-cyano-1-oxo-2-propen-1-yl]amino]-4-phenyl-, ethyl ester
MF C30 H21 Br Cl2 N2 O4 S



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

```
=> d his

     (FILE 'HOME' ENTERED AT 11:49:07 ON 05 SEP 2007)

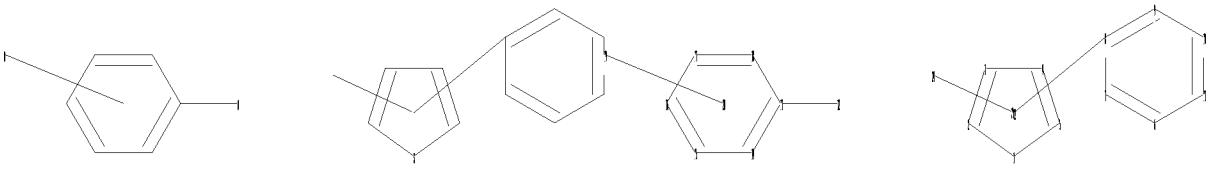
     FILE 'REGISTRY' ENTERED AT 11:49:20 ON 05 SEP 2007
L1             STRUCTURE UPLOADED
L2          50 S L1
L3             STRUCTURE UPLOADED
L4          50 S L3

=> s l3 full
FULL SEARCH INITIATED 11:52:01 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   741628 TO ITERATE

100.0% PROCESSED   741628 ITERATIONS                          21110 ANSWERS
SEARCH TIME: 00.00.08

L5        21110 SEA SSS FUL L3

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\8.str
```



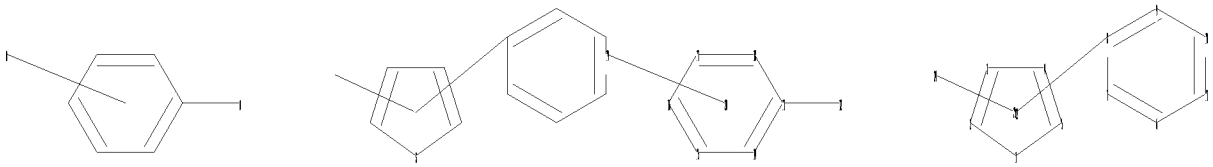
```
chain nodes :
12  19  24
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  13  14  15  16  17  18
chain bonds :
12-13
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-11  7-8  8-9  9-10  10-11  13-14  13-18  14-15
15-16  16-17  17-18
exact/norm bonds :
12-13
exact bonds :
1-2  1-5  2-3  3-4  4-5
normalized bonds :
6-7  6-11  7-8  8-9  9-10  10-11  13-14  13-18  14-15  15-16  16-17  17-18
isolated ring systems :
containing 1 :


G1:Cb,Ak

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:CLASS  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:CLASS
20:Atom  22:Atom  24:CLASS  25:Atom
```

L6 STRUCTURE UPLOADED

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\9.str



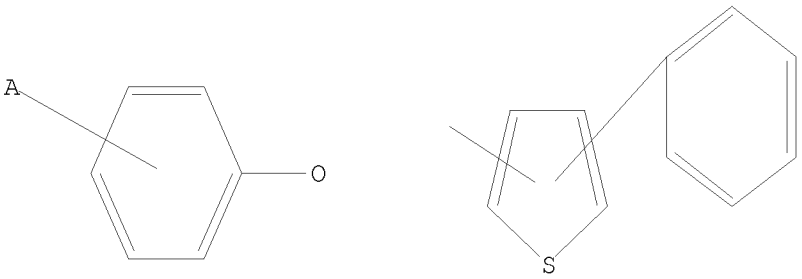
chain nodes :
12 19
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18
ring/chain nodes :
24
chain bonds :
12-13
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
12-13
exact bonds :
1-2 1-5 2-3 3-4 4-5
normalized bonds :
6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 :

G1:Cb,Ak

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:Atom 22:Atom 24:CLASS 25:Atom

L7 STRUCTURE UPLOADED

=> d
L7 HAS NO ANSWERS
L7 STR




G1 Cb,Ak

Structure attributes must be viewed using STN Express query preparation.

```
=> s l7 full sub=L5
FULL SUBSET SEARCH INITIATED 11:53:36 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -    17105 TO ITERATE

100.0% PROCESSED    17105 ITERATIONS                          12969 ANSWERS
SEARCH TIME: 00.00.01

L8        12969 SEA SUB=L5 SSS FUL L7

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\10.str
```

```
chain nodes :
12  19  26
ring nodes :
```

```
1  2  3  4  5  6  7  8  9  10  11  13  14  15  16  17  18
ring/chain nodes :
24
chain bonds :
12-13  12-26
ring bonds :
1-2  1-5  2-3  3-4  4-5  6-7  6-11  7-8  8-9  9-10  10-11  13-14  13-18  14-15
15-16  16-17  17-18
exact/norm bonds :
12-13  12-26
exact bonds :
1-2  1-5  2-3  3-4  4-5
normalized bonds :
6-7  6-11  7-8  8-9  9-10  10-11  13-14  13-18  14-15  15-16  16-17  17-18
isolated ring systems :
containing 1 : 6 : 13 :

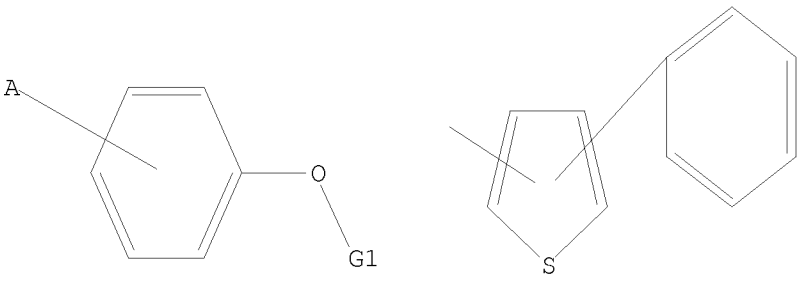

G1:Cb,Ak

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
11:Atom  12:CLASS  13:Atom  14:Atom  15:Atom  16:Atom  17:Atom  18:Atom  19:CLASS
20:Atom  22:Atom  24:CLASS  25:Atom  26:CLASS



L9      STRUCTURE UPLOADED

=>  d
L9 HAS NO ANSWERS
L9              STR
```




```
G1 Cb,Ak


Structure attributes must be viewed using STN Express query preparation.

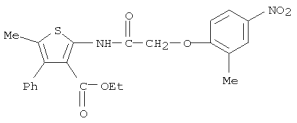

=> s l9 full sub=L8
FULL SUBSET SEARCH INITIATED 11:55:28 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -    12969 TO ITERATE
```

100.0% PROCESSED 12969 ITERATIONS 12463 ANSWERS
SEARCH TIME: 00.00.01

L10 12463 SEA SUB=L8 SSS FUL L9

=> d scan

L10 12463 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3-Thiophenecarboxylic acid, 5-methyl-2-[[2-(2-methyl-4-nitrophenoxy)acetyl]amino]-4-phenyl-, ethyl ester
MF C23 H22 N2 O6 S



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\12.str

chain nodes :
12 19 23 27 28 30
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18
ring/chain nodes :
24
chain bonds :
2-27 3-28 4-30 5-7 12-13 12-23
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
2-27 3-28 4-30 12-13 12-23
exact bonds :
1-2 1-5 2-3 3-4 4-5 5-7
normalized bonds :
6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 6 : 13 :

G1:Cb,Ak

G2:H,[*1]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:Atom 23:CLASS 24:CLASS 27:CLASS 28:CLASS 30:CLASS

L11 STRUCTURE UPLOADED

=>
Uploading C:\Program Files\Stnexp\Queries\10540330\11.str

chain nodes :
12 19 23 27 28 30
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 13 14 15 16 17 18
ring/chain nodes :
24
chain bonds :
2-27 3-28 4-8 5-30 12-13 12-23
ring bonds :
1-2 1-5 2-3 3-4 4-5 6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15
15-16 16-17 17-18
exact/norm bonds :
2-27 3-28 5-30 12-13 12-23
exact bonds :
1-2 1-5 2-3 3-4 4-5 4-8
normalized bonds :
6-7 6-11 7-8 8-9 9-10 10-11 13-14 13-18 14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 6 : 13 :

G1:Cb,Ak

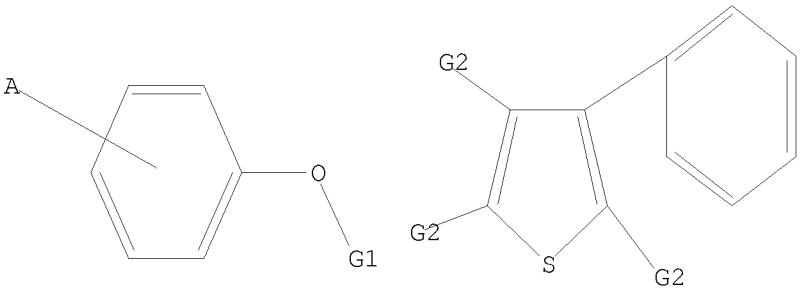
G2:H,[*1]

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:Atom 23:CLASS 24:CLASS 27:CLASS 28:CLASS 30:CLASS

L12 STRUCTURE UPLOADED

=> d
L12 HAS NO ANSWERS
L12 STR

1

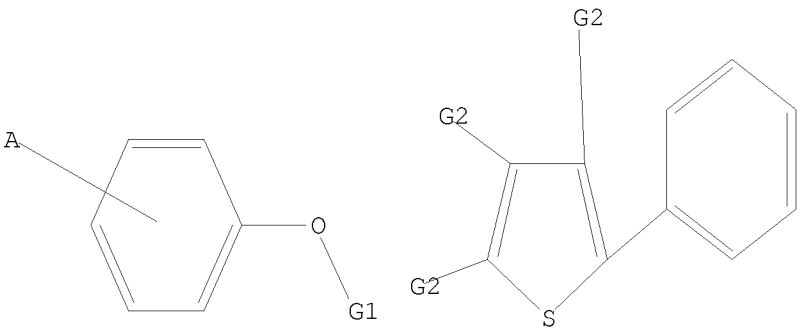



G1 Cb,Ak
G2 H,[@1]

Structure attributes must be viewed using STN Express query preparation.

=> d l11
L11 HAS NO ANSWERS
L11 STR

1




G1 Cb,Ak

G2 H,[@1]

Structure attributes must be viewed using STN Express query preparation.

```
=> s l11 full sub=L10
FULL SUBSET SEARCH INITIATED 12:00:09 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -     2559 TO ITERATE

100.0% PROCESSED     2559 ITERATIONS                              937 ANSWERS
SEARCH TIME: 00.00.01

L13          937 SEA SUB=L10 SSS FUL L11

=> s l12 full sub=L10
FULL SUBSET SEARCH INITIATED 12:00:18 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED -    10195 TO ITERATE

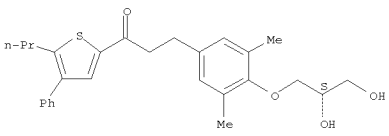
100.0% PROCESSED    10195 ITERATIONS                              428 ANSWERS
SEARCH TIME: 00.00.01

L14          428 SEA SUB=L10 SSS FUL L12

=> d scan
```

L14 428 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)-
MF C27 H32 O4 S

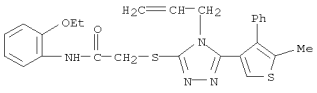
Absolute stereochemistry.



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

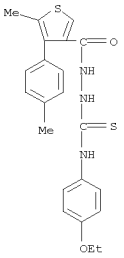
L14 428 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetamide, N-(2-ethoxyphenyl)-2-[[5-(5-methyl-4-phenyl-3-thienyl)-4-(2-propen-1-yl)-4H-1,2,4-triazol-3-yl]thio]-
MF C26 H26 N4 O2 S2



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L14 428 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3-Thiophenecarboxylic acid, 5-methyl-4-(4-methylphenyl)-, 2-[[(4-ethoxyphenyl)amino]thioxomethyl]hydrazide
MF C22 H23 N3 O2 S2



**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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=> d his

     (FILE 'HOME' ENTERED AT 11:49:07 ON 05 SEP 2007)

     FILE 'REGISTRY' ENTERED AT 11:49:20 ON 05 SEP 2007
L1             STRUCTURE UPLOADED
L2          50 S L1
L3             STRUCTURE UPLOADED
L4          50 S L3
L5       21110 S L3 FULL
L6             STRUCTURE UPLOADED
L7             STRUCTURE UPLOADED
L8       12969 S L7 FULL  SUB=L5
L9             STRUCTURE UPLOADED
L10      12463 S L9 FULL  SUB=L8
L11            STRUCTURE UPLOADED
L12            STRUCTURE UPLOADED
L13        937 S L11 FULL  SUB=L10
L14        428 S L12 FULL  SUB=L10

=> fil caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                  ENTRY    SESSION
FULL ESTIMATED COST                              343.70     343.91

FILE 'CAPLUS' ENTERED AT 12:01:42 ON 05 SEP 2007
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 5 Sep 2007  VOL 147 ISS 11
FILE LAST UPDATED: 4 Sep 2007  (20070904/ED)

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=> s l13
L15         246 L13

=> s l14
L16          88 L14
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```
=> s l15 or l16
L17        262 L15 OR L16

=> log h
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       5.17     349.08

 SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 12:08:18 ON 05 SEP 2007

Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:SSPTAJMN1626

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 13:28:30 ON 05 SEP 2007
FILE 'CAPLUS' ENTERED AT 13:28:30 ON 05 SEP 2007
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       5.17     349.08

=> d his

     (FILE 'HOME' ENTERED AT 11:49:07 ON 05 SEP 2007)

     FILE 'REGISTRY' ENTERED AT 11:49:20 ON 05 SEP 2007
L1              STRUCTURE UPLOADED
L2           50 S L1
L3              STRUCTURE UPLOADED
L4           50 S L3
L5        21110 S L3 FULL
L6              STRUCTURE UPLOADED
L7              STRUCTURE UPLOADED
L8        12969 S L7 FULL  SUB=L5
L9              STRUCTURE UPLOADED
L10       12463 S L9 FULL  SUB=L8
L11             STRUCTURE UPLOADED
L12             STRUCTURE UPLOADED
L13         937 S L11 FULL  SUB=L10
L14         428 S L12 FULL  SUB=L10

     FILE 'CAPLUS' ENTERED AT 12:01:42 ON 05 SEP 2007
L15         246 S L13
L16          88 S L14
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L17         262 S L15 OR L16

=> s l17 and ppar
          9692 PPAR
L18         12 L17 AND PPAR

=> d ibib abs hitstr 1-12
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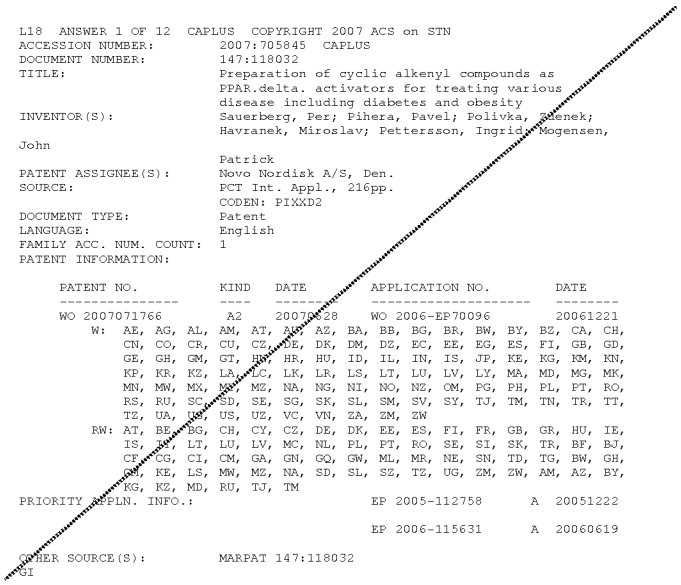
L18 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:705845 CAPLUS
DOCUMENT NUMBER: 147:118032
TITLE: Preparation of cyclic alkenyl compounds as PPAR.delta. activators for treating various disease including diabetes and obesity
INVENTOR(S): Sauerberg, Per; Pihera, Pavel; Polivka, Zdenek; Havranek, Miroslav; Pettersson, Ingrid; Mogensen, John
Patrick
PATENT ASSIGNEE(S): Novo Nordisk A/S, Den.
SOURCE: PCT Int. Appl., 216pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007071766 | A2 | 20070628 | WO 2006-EP70096 | 20061221 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-112758 A 20051222
EP 2006-115631 A 20060619

OTHER SOURCE(S): MARPAT 147:118032
GI

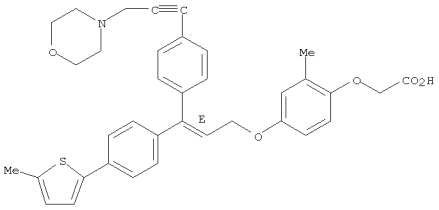


* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Novel compds. of the general formula I (wherein the "large X" is a double bond, X1 is heterocyclyl, aryl, heteroaryl, etc.; X2 is (un)substituted arylene or heteroarylene; X3 is (un)substituted aryl or heteroaryl; Ar is (un)substituted arylene; Y1 is O or S; and Y2 is O, S or CH2; and Z is -(CH2)n- wherein n = 1-3; and R1 = H, halo, etc.) the use of these compds.
as pharmaceuticals, pharmaceutical compns. comprising the compds. and methods of treatment employing these compds. and compns. are claimed. The
present compds. are activators of PPAR.delta. and should be

L18 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
useful for treating conditions mediated by the same, such as diabetes, impaired glucose tolerance, insulin resistance, cardiovascular disease, etc.; no biol. data is given in the patent. Example compd. II was prepd. by reacting Me
(Z)-[4-[3-(4-iodophenyl)-3-(4-trifluoromethylphenyl)allyloxy]-2-methylphenoxy]acetate with 2-ethynylpyridine and converting the ester
obtained to the acid.
IT 942595-09-7P 942595-26-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of aryl, heteroaryl, and heterocyclic compds.
as PPAR.delta. activators for treating various disease including diabetes and obesity)
RN 942595-09-7 CAPLUS
CN Acetic acid,
2-[2-methyl-4-[[(2E)-3-[4-(5-methyl-2-thienyl)phenyl]-3-[4-[3-(4-morpholinyl)-1-propyn-1-yl]phenyl]-2-propen-1-yl]oxy]phenoxy]- (CA INDEX NAME)

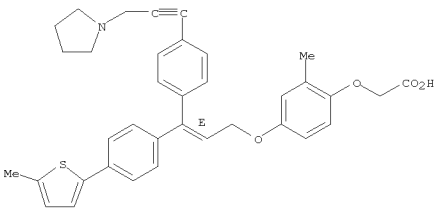
Double bond geometry as shown.



RN 942595-26-8 CAPLUS
CN Acetic acid,
2-[2-methyl-4-[[(2E)-3-[4-(5-methyl-2-thienyl)phenyl]-3-[4-[3-(1-pyrrolidinyl)-1-propyn-1-yl]phenyl]-2-propen-1-yl]oxy]phenoxy]- (CA INDEX NAME)

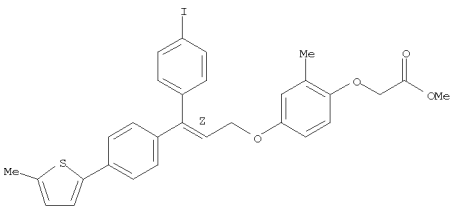
Double bond geometry as shown.

L18 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



IT 942595-11-1P 942595-12-2P, Methyl (E)-[2-methyl-4-[[3-[4-[5-(methyl)thiophen-2-yl]phenyl]-3-[4-[3-(morpholin-4-yl)propynyl]phenyl]allyl]oxy]phenoxy]acetate 942595-27-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aryl, heteroaryl, and heterocyclic compds. as PPAR δ activators for treating various disease including diabetes and obesity)
RN 942595-11-1 CAPLUS
CN Acetic acid,
2-[4-[[(2Z)-3-(4-iodophenyl)-3-[4-(5-methyl-2-thienyl)phenyl]-2-propen-1-yl]oxy]-2-methylphenoxy]-, methyl ester (CA INDEX NAME)

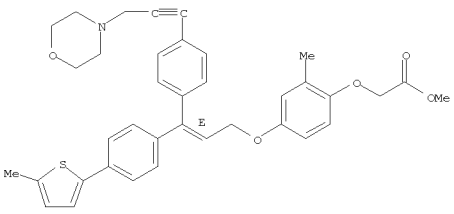
Double bond geometry as shown.



RN 942595-12-2 CAPLUS
CN Acetic acid,
2-[2-methyl-4-[[(2E)-3-[4-(5-methyl-2-thienyl)phenyl]-3-[4-[3-(4-morpholinyl)-1-propyn-1-yl]phenyl]-2-propen-1-yl]oxy]phenoxy]-, methyl ester (CA INDEX NAME)

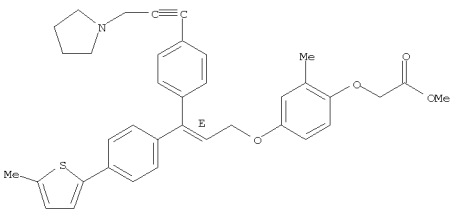
Double bond geometry as shown.

L18 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 942595-27-9 CAPLUS
CN Acetic acid,
2-[2-methyl-4-[[(2E)-3-[4-(5-methyl-2-thienyl)phenyl]-3-[4-[3-(1-pyrrolidinyl)-1-propyn-1-yl]phenyl]-2-propen-1-yl]oxy]phenoxy]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



L18 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

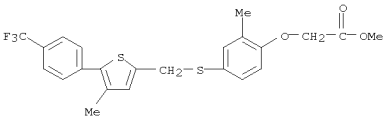
ACCESSION NUMBER: 2006:1272380 CAPLUS
DOCUMENT NUMBER: 146:100309
TITLE: Insights into the mechanism of the site-selective sequential palladium-catalyzed cross-coupling reactions of dibromothiophenes/dibromothiazoles and arylboronic acids. Synthesis of PPAR β/δ agonists
AUTHOR(S): Pereira, Raquel; Furst, Audrey; Iglesias, Beatriz; Germain, Pierre; Gronemeyer, Hinrich; de Lera, Angel R.
CORPORATE SOURCE: Departamento de Quimica Organica, Universidade de Vigo, Vigo, 36310, Spain
SOURCE: Organic & Biomolecular Chemistry (2006), 4(24), 4514-4525
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:100309

AB A reactivity study, aided by NMR spectroscopy, allowed a mechanistic rationale to be postulated for the palladium-catalyzed regioselective coupling of arylboronic acids (and arylstannane where feasible) at the position next to the sulfur atom in functionalized dibromothiophenes and dibromothiazoles. The anal. of the NMR spectra (using 19F from the boronic acid CF3 group and 31P from the phosphine of the catalyst as probes) of the entire reaction starting from the dibromoheterocycles allowed the qual. proposal that the transmetalation is the rate-limiting step for both sequential substitution processes. The extremely facile oxidative addition at the C-Br bond next to the sulfur atom of the heterocycle instead dets. the positional selectivity. An addnl. Stille reaction then replaced the second halogen, providing the trisubstituted heterocyclic scaffolds of PPAR ligands, which displayed PPAR.beta./δ agonist activity, as revealed by reporter assays in living cells.

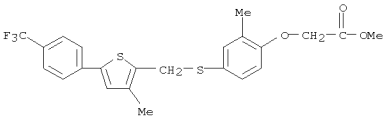
IT 918164-59-7P 918164-60-0P 918164-61-1P
918164-62-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(hydrolysis; mechanism of the site-selective sequential Pd-catalyzed cross-coupling reactions of dibromothiophenes/dibromothiazoles and arylboronic acids and synthesis of PPAR.beta./δ agonists)

RN 918164-59-7 CAPLUS
CN Acetic acid, 2-[2-methyl-4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]-, methyl ester (CA INDEX NAME)

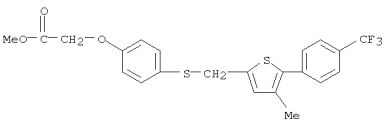
L18 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 918164-60-0 CAPLUS
CN Acetic acid, 2-[2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]-, methyl ester (CA INDEX NAME)

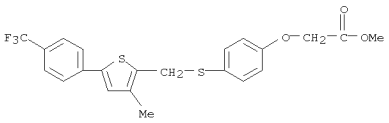


RN 918164-61-1 CAPLUS
CN Acetic acid, 2-[4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]-, methyl ester (CA INDEX NAME)



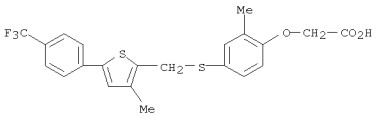
RN 918164-62-2 CAPLUS
CN Acetic acid, 2-[4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]-, methyl ester (CA INDEX NAME)

L18 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

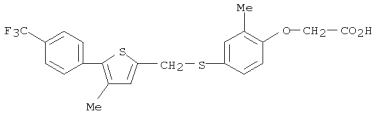


IT 476154-13-9P 918164-63-3P 918164-64-4P
918164-65-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target PPAR.beta./δ agonist; mechanism of the site-selective sequential Pd-catalyzed cross-coupling reactions of dibromothiophenes/dibromothiazoles and arylboronic acids and synthesis of PPAR.beta./δ agonists)

RN 476154-13-9 CAPLUS
CN Acetic acid, 2-[2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

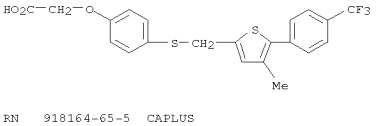


RN 918164-63-3 CAPLUS
CN Acetic acid, 2-[2-methyl-4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

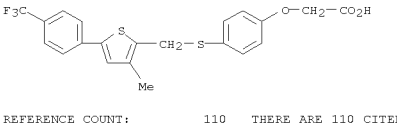


RN 918164-64-4 CAPLUS
CN Acetic acid, 2-[4-[[[4-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

L18 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 918164-65-5 CAPLUS
CN Acetic acid, 2-[4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)



REFERENCE COUNT: 110 THERE ARE 110 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:494373 CAPLUS
DOCUMENT NUMBER: 145:8033
TITLE: Biaryl compounds as selective modulators of PPAR.gamma., their preparation, pharmaceutical and cosmetic compositions, and use in therapy
INVENTOR(S): Bolteau, Jean-Guy; Clary, Laurence; Millois Barbuis, Corinne
PATENT ASSIGNEE(S): Galderma Research & Development, S.N.C., Fr.
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006053791 | A2 | 20060526 | WO 2005-EP13533 | 20051117 |
| WO 2006053791 | A3 | 20060622 | | |
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| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| FR 2878247 | A1 | 20060526 | FR 2004-12326 | 20041119 |
| AU 2005305969 | A1 | 20060526 | AU 2005-305969 | 20051117 |
| CA 2587545 | A1 | 20060526 | CA 2005-2587545 | 20051117 |
| EP 1814871 | A2 | 20070808 | EP 2005-817959 | 20051117 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |

PRIORITY APPLN. INFO.: FR 2004-12326 A 20041119
US 2004-631989P P 20041201
WO 2005-EP13533 W 20051117

OTHER SOURCE(S): MARPAT 145:8033
GI

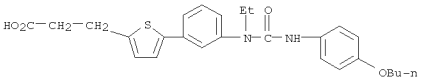
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to biaryl compds. of general formula I (Ar1-Ar2), which are modulators of peroxisome proliferator-activated receptor subtype

L18 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
γ ( PPAR.gamma.). In compds. I, Ar1 and Ar2 are independently selected from Ph, pyridinyl, pyrimidinyl, pyrazinyl, pyridazinyl, thienyl, isothiazolyl, thiazolyl, thiadiazolyl, furanyl, isoxazolyl, oxazolyl, oxadiazolyl, pyrrolyl, pyrazolyl, imidazolyl, and triazolyl, where Ar2 is substituted with a 3-oxopropyl or 3-oxopropenyl moiety. The invention also relates to the prepn. of I, pharmaceutical or cosmetic compns. comprising, in a physiol. acceptable support, at least one compd. of formula I, as well as to the use of the compns. in human or veterinary medicine, or in cosmetic compns. Me 3-hydroxy-4-iodobenzoate was alkylated with 1-iodobutane, reduced with LiBH4, and oxidized with MnO2 giving 3-butoxy-4-iodobenzaldehyde, which underwent Wittig olefination with Me (triphenylphosphoranylidene)acetate, resulting in the formation of acrylate II. Reductive amination of 4-bromothiophene-2-carboxaldehyde with methylamine followed by N-protection and borination with pinacol diborane gave boronate III, which underwent Suzuki coupling with acrylate II, hydrogenation, deprotection, acylation with octanoyl chloride, and ester hydrolysis to give compd. IV. Several compds. of the invention are selective modulators of PPAR.gamma., e.g., compd. IV expresses Kd app value of 2 nM to PPAR.gamma., but is not active towards either PPAR.alpha. or PPAR.delta..

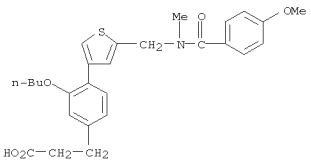
IT 887832-03-3P, 3-[5-[3-[N'-(4-Butoxyphenyl)-N-ethylureido]phenyl]thien-2-yl]propanoic acid 887921-69-9P, 3-[3-Butoxy-4-[5-[[N-(4-methoxybenzoyl)-N-methylamino]methyl]thien-3-yl]phenyl]propanoic acid 887921-71-3P, 3-[3-Butoxy-4-[5-[[N-(3-methoxybenzoyl)-N-methylamino]methyl]thien-3-yl]phenyl]propanoic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of biaryl compds. as PPAR.gamma. modulators)

RN 887832-03-3 CAPLUS
CN 2-Thiophenepropanoic acid, 5-[3-[[[(4-butoxyphenyl)amino]carbonyl]ethylamino]phenyl]- (9CI) (CA INDEX NAME)

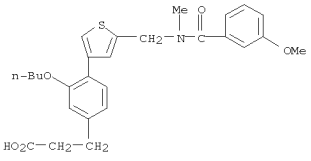


RN 887921-69-9 CAPLUS
CN Benzenepropanoic acid, 3-butoxy-4-[5-[[(4-methoxybenzoyl)methylamino]methyl]-3-thienyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



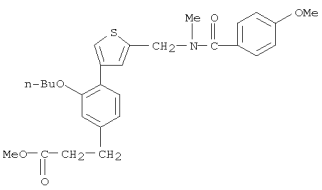
RN 887921-71-3 CAPLUS
CN Benzenepropanoic acid, 3-butoxy-4-[5-[[(3-methoxybenzoyl)methylamino]methyl]-3-thienyl]- (9CI) (CA INDEX NAME)



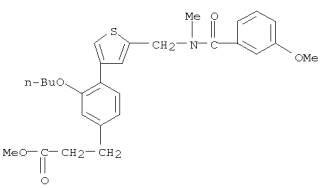
IT 887921-70-2P, Methyl 3-[3-butoxy-4-[5-[[N-(4-methoxybenzoyl)-N-methylamino]methyl]thien-3-yl]phenyl]propionate 887921-72-4P, Methyl 3-[3-butoxy-4-[5-[[N-(3-methoxybenzoyl)-N-methylamino]methyl]thien-3-yl]phenyl]propionate
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of biaryl compds. as PPAR.gamma. modulators)

RN 887921-70-2 CAPLUS
CN Benzenepropanoic acid, 3-butoxy-4-[5-[[(4-methoxybenzoyl)methylamino]methyl]-3-thienyl]-, methyl ester (9CI) (CA INDEX NAME)

L18 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 887921-72-4 CAPLUS
CN Benzenepropanoic acid, 3-butoxy-4-[5-[[(3-methoxybenzoyl)methylamino]methyl]-3-thienyl]-, methyl ester (9CI) (CA INDEX NAME)



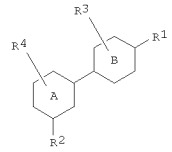
L18 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:493925 CAPLUS
DOCUMENT NUMBER: 145:8180
TITLE: Preparation of substituted hetero/aryl propanoic acid derivatives, as PPAR.gamma. activators, and their use in cosmetic and pharmaceutical compositions
INVENTOR(S): Bolteau, Jean Guy; Clary, Laurence; Barbuis, Corinne
PATENT ASSIGNEE(S): Galderma Research & Development, Fr.
SOURCE: Fr. Demande, 55 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2878247 | A1 | 20060526 | FR 2004-12326 | 20041119 |
| AU 2005305969 | A1 | 20060526 | AU 2005-305969 | 20051117 |
| CA 2587545 | A1 | 20060526 | CA 2005-2587545 | 20051117 |
| WO 2006053791 | A2 | 20060526 | WO 2005-EP13533 | 20051117 |
| WO 2006053791 | A3 | 20060629 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| EP 1814871 | A2 | 20070808 | EP 2005-817959 | 20051117 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |

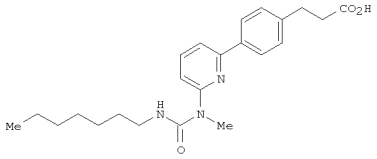
PRIORITY APPLN. INFO.: FR 2004-12326 A 20041119
US 2004-631989P P 20041201
WO 2005-EP13533 W 20051117

OTHER SOURCE(S): MARPAT 145:8180
GI

L18 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I



II

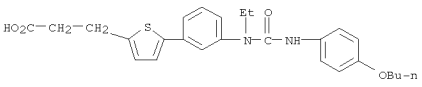
AB Title compds. I [R1 = CH2CH2COR5, CH:CH-COR5; R5 = OH, alkoxy, aryloxy, etc.; R2 = (CH2)m-NR6-CQ-(NH)nR7; R6 = H, alkyl; R7 = alkyl, hetero/aryl, aralkyl, heterocyclyl; m, n = 0-1; Q = O, S; R3, R4 = independently H, halo, alkyl, etc.; A, B = independently (un)substituted Ph, pyridinyl, pyrimidinyl, thiazolyl, etc.; when one of A or B is aryl, then the other one is heteroaryl; ; and their optical and geometrical isomers] were prepared as PPAR activators for pharmaceutical or cosmetic uses. E.g., a multi-step synthesis starting from 2-amino-6-bromopyridine, was given for acid II. In a crossover-curve PPAR transactivation test, II displayed specific affinity for PPAR.gamma. (Kd = 250 nM) compared to PPAR.alpha. and PPAR.delta.. For example, a tablet formulation contains 3-[5-[3-[(Methyloctanoylamino)methyl]phenyl]thiophen-2-yl]acrylic acid 0.001, starch 0.114, dicalcium phosphate 0.020, silica 0.020, lactose 0.030, talc 0.010, and Mg stearate 0.005 g. I are useful in dermatol. and in the field of cardiovascular and immune diseases, and/or lipid metabolism-related diseases.

IT 887832-03-3P, 3-[5-[3-[3-(4-Butoxyphenyl)-1-ethylureido]phenyl]thiophen-2-yl]propanoic acid
RL: COS (Cosmetic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of substituted hetero/aryl propanoic acid derivs. as PPAR activators for pharmaceuticals and cosmetics)

RN 887832-03-3 CAPLUS

L18 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN 2-Thiophenepropanoic acid, 5-[3-[[[(4-butoxyphenyl)amino]carbonyl]ethylamino]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

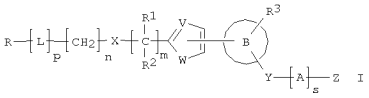
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:878382 CAPLUS
DOCUMENT NUMBER: 141:350161
TITLE: Preparation of azole compounds as PTP1B inhibitors
INVENTOR(S): Ikemoto, Tomoyuki; Tanaka, Masahiro; Yuno, Takeo; Sakamoto, Johei; Nakanishi, Hiroyuki; Nakagawa, Yuichi; Ohta, Takeshi; Sakata, Shohei; Morinaga, Hisayo
PATENT ASSIGNEE(S): Japan Tobacco Inc., Japan
SOURCE: PCT Int. Appl., 542 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

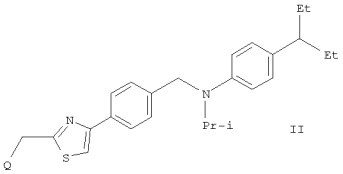
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004089918 | A1 | 20041021 | WO 2004-JP5119 | 20040409 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004228565 | A1 | 20041021 | AU 2004-228565 | 20040409 |
| CA 2521830 | A1 | 20041021 | CA 2004-2521830 | 20040409 |
| EP 1553091 | A1 | 20050713 | EP 2004-726765 | 20040409 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| BR 2004009136 | A | 20060425 | BR 2004-9136 | 20040409 |
| CN 1780823 | A | 20060531 | CN 2004-80009487 | 20040409 |
| JP 3819403 | B2 | 20060906 | JP 2005-505323 | 20040409 |
| JP 2006272476 | A | 20051006 | JP 2005-133755 | 20050428 |
| US 2006122181 | A1 | 20060608 | US 2005-176846 | 20050707 |
| NO 2005005246 | A | 20051221 | NO 2005-5246 | 20051108 |
| IN 2005CN02927 | A | 20070608 | IN 2005-CN2927 | 20051109 |

PRIORITY APPLN. INFO.: JP 2003-105267 A 20030409
JP 2003-157590 A 20030603
JP 2005-505323 A3 20040409
WO 2004-JP5119 W 20040409

OTHER SOURCE(S): MARPAT 141:350161
GI

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

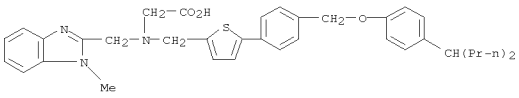




AB Title compds. I [V = N, CH; W = S, O; m = 0-2; R1, R2 = H, alkyl; X = NR4,
etc.; R4 = H, alkyl; n = 0-4; p = 0, 1; L = CR20R21, etc.; R20 = H, alkyl,
etc.; R21 = H, alkyl, etc.; R = CO2R19, etc.; R19 = H, alkyl; B = aryl,
heteroaryl; R3 = H, halo, etc.; Y = O, etc.; s = 0, 1; A = (un)substituted
alkylene with cycloalkyl; Z = cycloalkyl, etc.] were prepared For example,
O-alkylation of 5-hydroxynicotinic acid Me ester with compound II [Q = Cl],
e.g., prepared from 4-bromoacetylbenzoic acid in 5 steps, followed by saponification
afforded compound II [3-carboxypyridin-5-yloxy] in 44.1% overall yield. In
PTP1B (protein tyrosine phosphatase 1B) inhibition assays, the IC50 value
of compound II [Q = 3-carboxypyridin-5-yloxy] was 0.28 μM. Compds. I are
claimed useful for the treatment of obesity, diabetes, etc. Formulations are given.

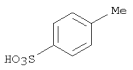
IT 776310-98-6P 776310-99-7P 776311-39-8P
776311-40-1P 776311-81-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of azole compds. as PTP1B inhibitors for treatment of obesity

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

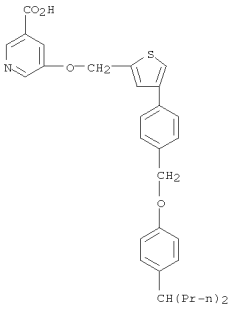
CRN 104-15-4
CMF C7 H8 O3 S



RN 776311-40-1 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]-, sulfate (1:1) (9CI) (CA INDEX NAME)

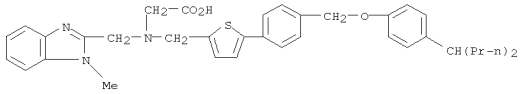
CM 1

CRN 776310-99-7
CMF C31 H33 N O4 S

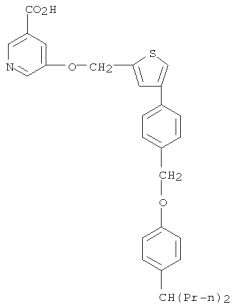


L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
and diabetes)

RN 776310-98-6 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



RN 776310-99-7 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



RN 776311-39-8 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, mono(4-methylbenzenesulfonate) (9CI) (CA INDEX NAME)

CM 1

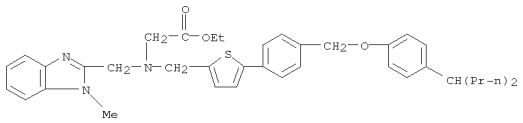
CRN 776310-98-6
CMF C36 H41 N3 O3 S

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 7664-93-9
CMF H2 O4 S

RN 776311-81-0 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, ethyl ester (9CI) (CA INDEX NAME)



IT 776311-02-5P 776311-05-8P 776311-06-9P
776311-07-0P 776311-08-1P 776311-09-2P
776311-12-7P 776311-14-9P 776311-15-0P
776311-22-9P 776311-25-2P 776311-26-3P
776311-28-5P 776311-29-6P 776311-30-9P
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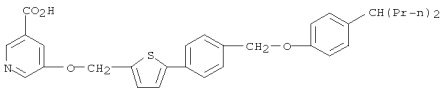
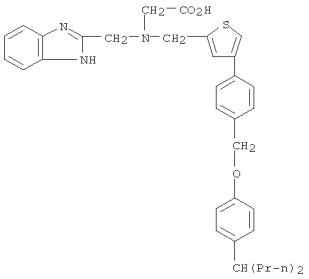
776312-03-9P 776312-04-0P 776312-05-1P
776312-62-0P 776312-63-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of azole compds. as PTP1B inhibitors for treatment of obesity

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
and diabetes)
RN 776311-02-5 CAPLUS
CN 3-Pyridinecarboxylic acid,
5-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phen
yl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

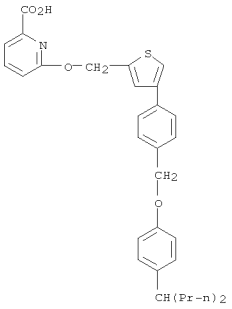


RN 776311-05-8 CAPLUS
CN Glycine, N-(1H-benzimidazol-2-ylmethyl)-N-[[4-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

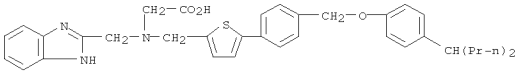


RN 776311-06-9 CAPLUS
CN 2-Pyridinecarboxylic acid,
6-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phen
yl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

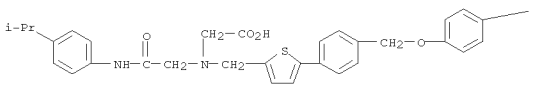


RN 776311-07-0 CAPLUS
CN Glycine, N-(1H-benzimidazol-2-ylmethyl)-N-[[5-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)



RN 776311-08-1 CAPLUS
CN Glycine,
N-[2-[[4-(1-methylethyl)phenyl]amino]-2-oxoethyl]-N-[[5-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

PAGE 1-A

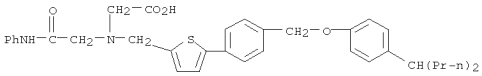


L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

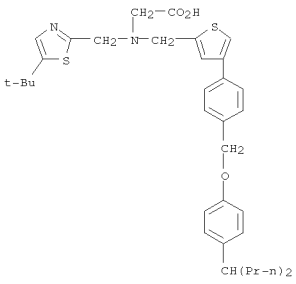
PAGE 1-B



RN 776311-09-2 CAPLUS
CN Glycine, N-[2-oxo-2-(phenylamino)ethyl]-N-[[5-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

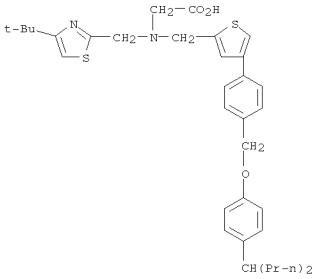


RN 776311-12-7 CAPLUS
CN Glycine, N-[[5-(1,1-dimethylethyl)-2-thiazolyl]methyl]-N-[[4-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

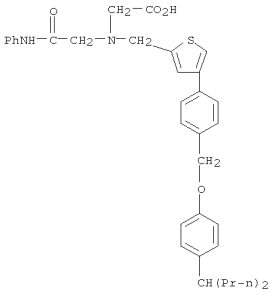


RN 776311-14-9 CAPLUS
CN Glycine, N-[[4-(1,1-dimethylethyl)-2-thiazolyl]methyl]-N-[[4-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

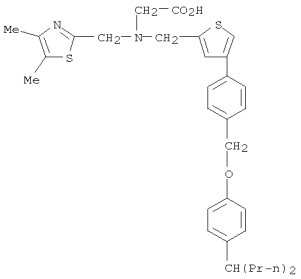


RN 776311-15-0 CAPLUS
CN Glycine, N-[2-oxo-2-(phenylamino)ethyl]-N-[[4-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)



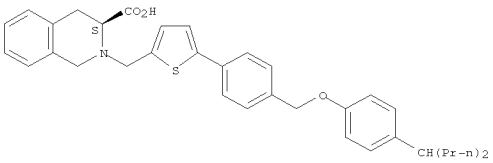
RN 776311-22-9 CAPLUS
CN Glycine, N-[(4,5-dimethyl-2-thiazolyl)methyl]-N-[[4-[4-[[4-(1-
propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX
NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



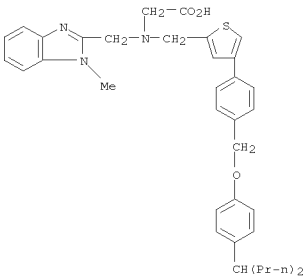
RN 776311-25-2 CAPLUS
CN 3-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

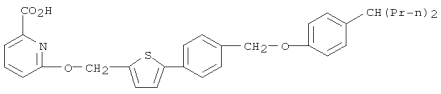


RN 776311-26-3 CAPLUS
CN Glycine, N-[2-[[4-(1-methylethyl)phenyl]amino]-2-oxoethyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

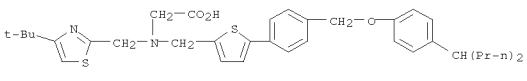
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 776311-30-9 CAPLUS
CN 2-Pyridinecarboxylic acid, 6-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

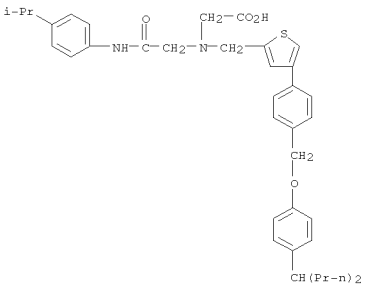


RN 776311-34-3 CAPLUS
CN Glycine, N-[[4-(1,1-dimethylethyl)-2-thiazolyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

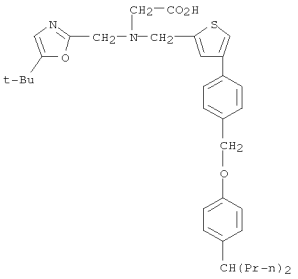


RN 776311-36-5 CAPLUS
CN Glycine, N-[[5-(1,1-dimethylethyl)-2-thiazolyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

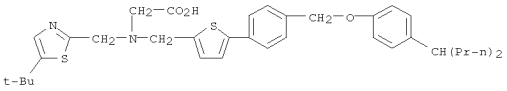


RN 776311-28-5 CAPLUS
CN Glycine, N-[[5-(1,1-dimethylethyl)-2-oxazolyl]methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

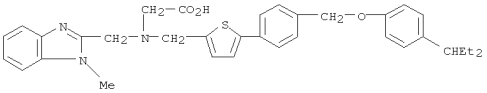


RN 776311-29-6 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

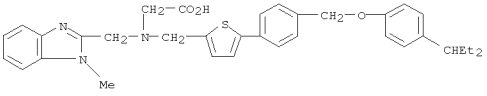


RN 776311-37-6 CAPLUS
CN Glycine, N-[[5-[4-[[4-(1-ethylpropyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-, sodium salt (9CI) (CA INDEX NAME)



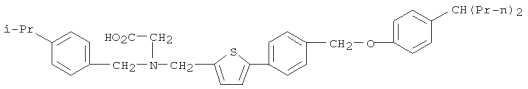
● Na

RN 776311-38-7 CAPLUS
CN Glycine, N-[[5-[4-[[4-(1-ethylpropyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-, calcium salt (9CI) (CA INDEX NAME)



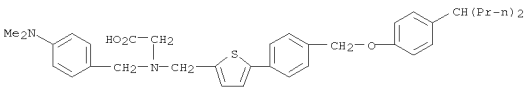
●1/2 Ca

RN 776311-41-2 CAPLUS
CN Glycine, N-[[4-(1-methylethyl)phenyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

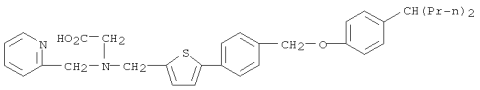


L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

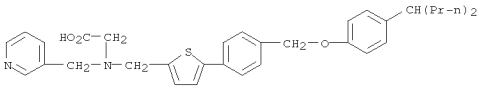
RN 776311-42-3 CAPLUS
CN Glycine, N-[[4-(dimethylamino)phenyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



RN 776311-43-4 CAPLUS
CN Glycine, N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-N-(2-pyridinylmethyl)- (9CI) (CA INDEX NAME)



RN 776311-44-5 CAPLUS
CN Glycine, N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-N-(3-pyridinylmethyl)- (9CI) (CA INDEX NAME)

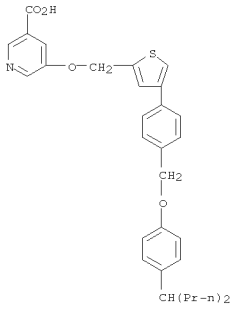


RN 776311-45-6 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 776310-99-7
CMF C31 H33 N O4 S

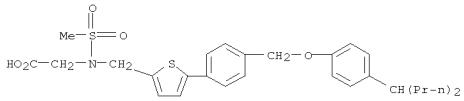
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



CM 2

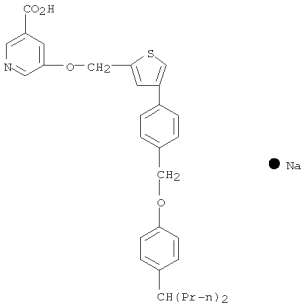
CRN 75-75-2
CMF C H4 O3 S

RN 776311-46-7 CAPLUS
CN Glycine, N-(methylsulfonyl)-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

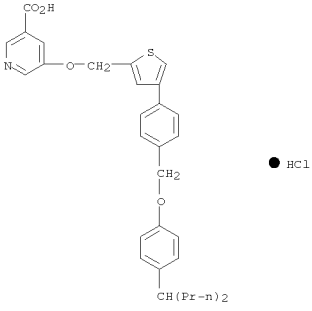


RN 776311-47-8 CAPLUS

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]-, sodium salt (9CI) (CA INDEX NAME)

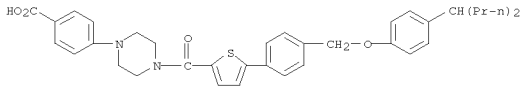


RN 776311-48-9 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]-, hydrochloride (9CI) (CA INDEX NAME)

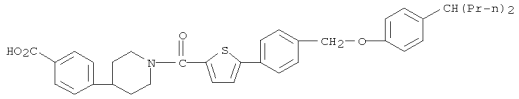


RN 776311-49-0 CAPLUS

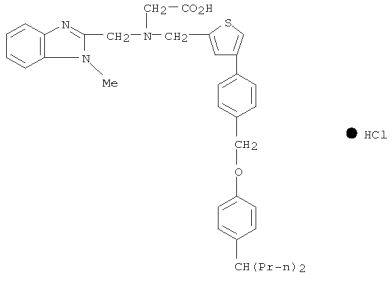
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzoic acid, 4-[4-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]carbonyl]-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 776311-50-3 CAPLUS
CN Benzoic acid, 4-[1-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]carbonyl]-4-piperidinyl]- (9CI) (CA INDEX NAME)



RN 776311-51-4 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

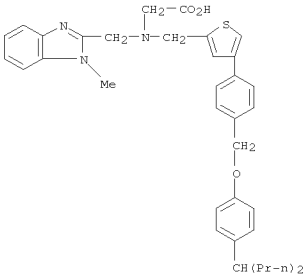


RN 776311-52-5 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, sulfate (1:1) (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 1

CRN 776311-29-6
CMF C36 H41 N3 O3 S

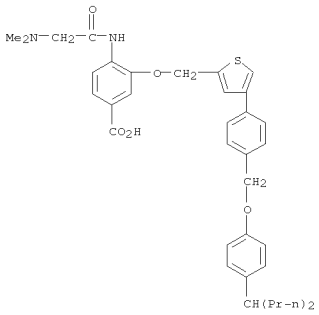


CM 2

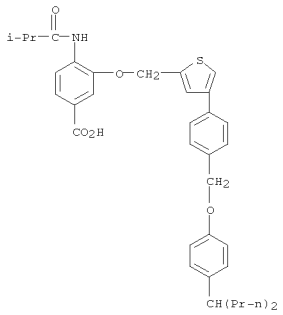
CRN 7664-93-9
CMF H2 O4 S

RN 776311-53-6 CAPLUS
CN Benzoic acid, 4-[[(dimethylamino)acetyl]amino]-3-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

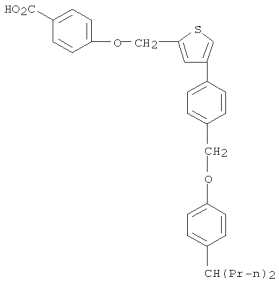


RN 776311-54-7 CAPLUS
CN Benzoic acid, 4-[(2-methyl-1-oxopropyl)amino]-3-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

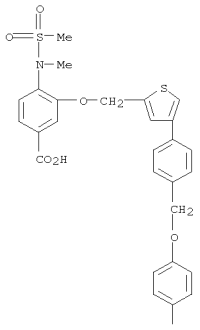
RN 776311-55-8 CAPLUS
CN Benzoic acid, 4-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



RN 776311-56-9 CAPLUS
CN Benzoic acid, 4-[methyl(methylsulfonyl)amino]-3-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

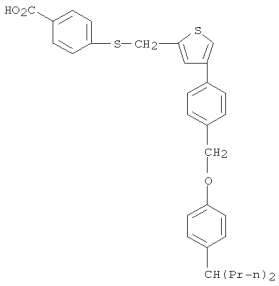
PAGE 1-A



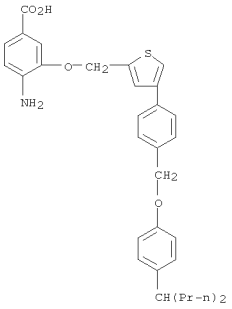
PAGE 2-A

RN 776311-57-0 CAPLUS
CN Benzoic acid, 4-[[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]thio]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



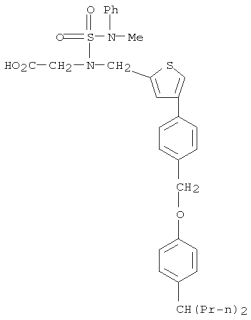
RN 776311-58-1 CAPLUS
CN Benzoic acid, 4-amino-3-[[4-[[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



RN 776311-62-7 CAPLUS
CN Glycine, N-[(methylphenylamino)sulfonyl]-N-[[4-[4-[[4-(1-

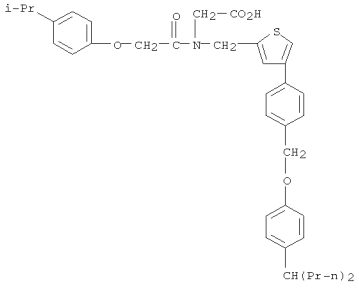
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

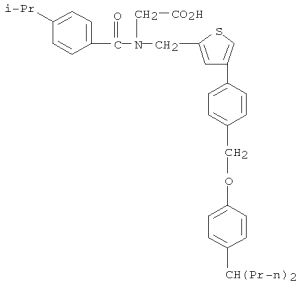


RN 776311-67-2 CAPLUS
CN Glycine, N-[[4-(1-methylethyl)phenoxy]acetyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

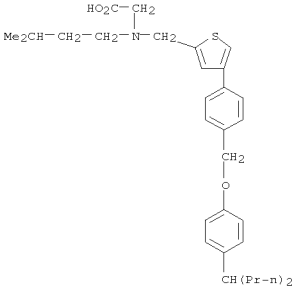


RN 776311-68-3 CAPLUS
CN Glycine, N-[4-(1-methylethyl)benzoyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

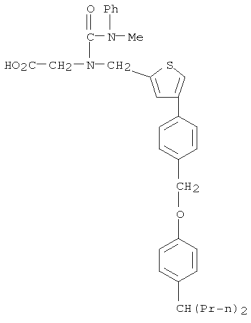


RN 776311-69-4 CAPLUS
CN Glycine, N-(3-methylbutyl)-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

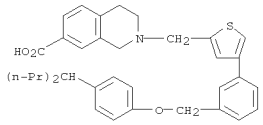


RN 776311-70-7 CAPLUS
CN Glycine, N-[(methylphenylamino)carbonyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

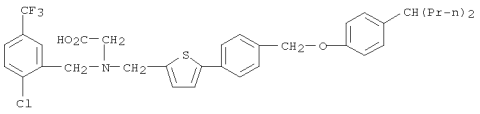


RN 776311-71-8 CAPLUS
CN 7-Isoquinolinecarboxylic acid, 1,2,3,4-tetrahydro-2-[[4-[3-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

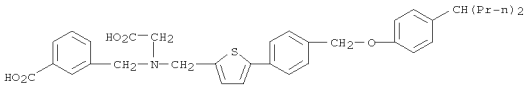
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 776311-73-0 CAPLUS
CN Glycine, N-[[2-chloro-5-(trifluoromethyl)phenyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

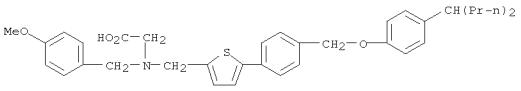


RN 776311-74-1 CAPLUS
CN Benzoic acid, 3-[[(carboxymethyl)[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]amino]methyl]- (9CI) (CA INDEX NAME)

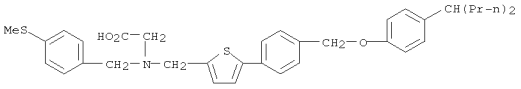


RN 776311-75-2 CAPLUS
CN Glycine, N-[(4-methoxyphenyl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

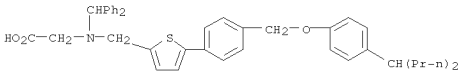
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 776311-76-3 CAPLUS
CN Glycine, N-[[4-(methylthio)phenyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



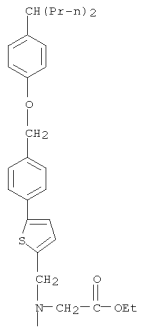
RN 776311-79-6 CAPLUS
CN Glycine, N-(diphenylmethyl)-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



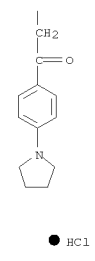
RN 776311-80-9 CAPLUS
CN Glycine, N-[2-oxo-2-[4-(1-pyrrolidinyl)phenyl]ethyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

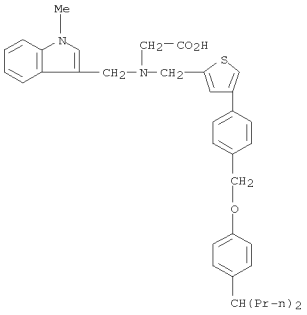


PAGE 2-A

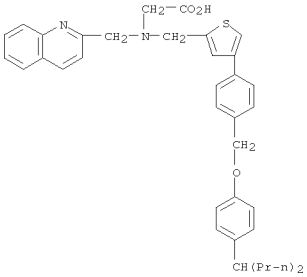


RN 776311-84-3 CAPLUS
CN Glycine, N-[(1-methyl-1H-indol-3-yl)methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

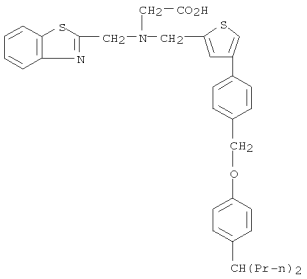


RN 776311-85-4 CAPLUS
CN Glycine, N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]-N-(2-quinolinylmethyl)- (9CI) (CA INDEX NAME)

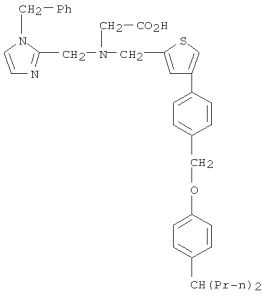


RN 776311-86-5 CAPLUS
CN Glycine, N-(2-benzothiazolylmethyl)-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

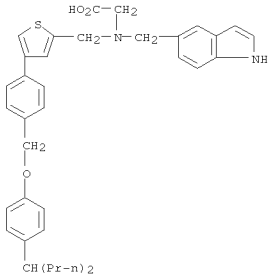


RN 776311-87-6 CAPLUS
CN Glycine, N-[[1-(phenylmethyl)-1H-imidazol-2-yl]methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



RN 776311-88-7 CAPLUS
CN Glycine, N-(1H-indol-5-ylmethyl)-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX

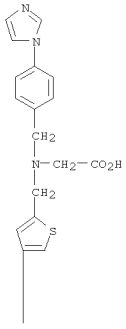
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
NAME)



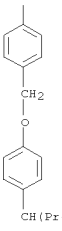
RN 776311-89-8 CAPLUS
CN Glycine, N-[[4-(1H-imidazol-1-yl)phenyl]methyl]-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

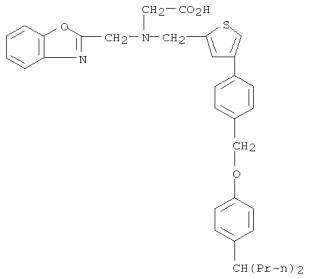


PAGE 2-A

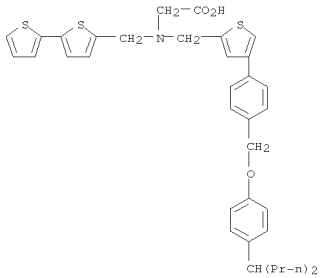


RN 776311-90-1 CAPLUS
CN Glycine, N-(2-benzoxazolylmethyl)-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

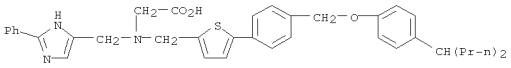


RN 776311-91-2 CAPLUS
CN Glycine, N-([2,2'-bithiophen]-5-ylmethyl)-N-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

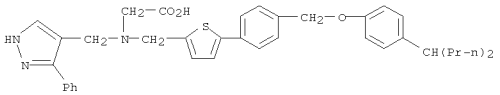


RN 776311-92-3 CAPLUS
CN Glycine, N-[(2-phenyl-1H-imidazol-4-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

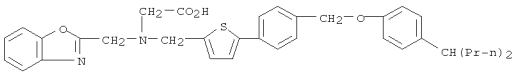
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



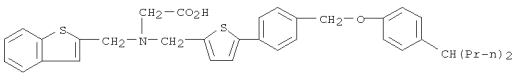
RN 776311-93-4 CAPLUS
CN Glycine, N-[(3-phenyl-1H-pyrazol-4-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



RN 776311-94-5 CAPLUS
CN Glycine, N-(2-benzoxazolylmethyl)-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

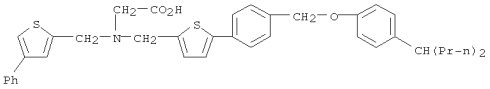


RN 776311-95-6 CAPLUS
CN Glycine, N-(benzo[b]thien-2-ylmethyl)-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

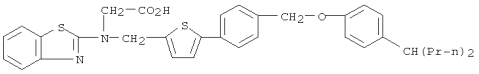


RN 776311-96-7 CAPLUS
CN Glycine, N-[(4-phenyl-2-thienyl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

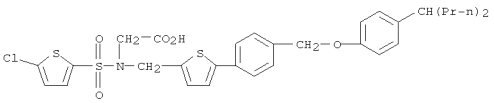
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



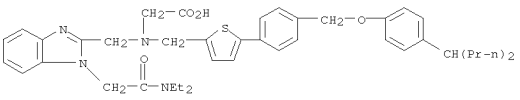
RN 776311-97-8 CAPLUS
CN Glycine, N-2-benzothiazolyl-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)



RN 776311-98-9 CAPLUS
CN Glycine, N-[(5-chloro-2-thienyl)sulfonyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

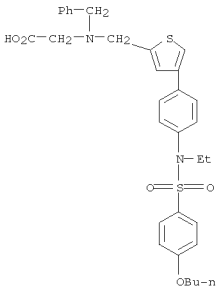


RN 776311-99-0 CAPLUS
CN Glycine, N-[[1-[2-(diethylamino)-2-oxoethyl]-1H-benzimidazol-2-yl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

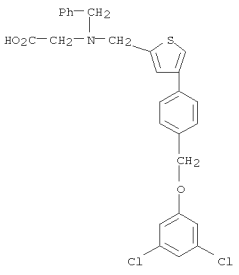


RN 776312-01-7 CAPLUS
CN Glycine, N-[[4-[4-[[(4-butoxyphenyl)sulfonyl]ethylamino]phenyl]-2-thienyl]methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

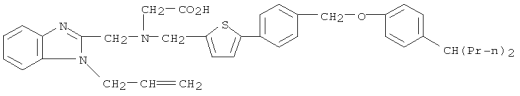


RN 776312-03-9 CAPLUS
CN Glycine, N-[[4-[4-[(3,5-dichlorophenoxy)methyl]phenyl]-2-thienyl]methyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



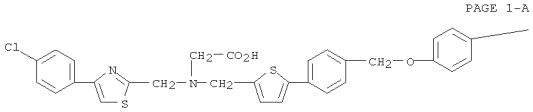
RN 776312-04-0 CAPLUS
CN Glycine, N-[[1-(2-propenyl)-1H-benzimidazol-2-yl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

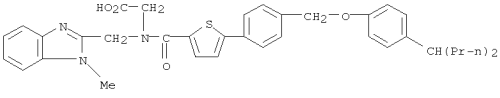


RN 776312-05-1 CAPLUS
CN Glycine, N-[[4-(4-chlorophenyl)-2-thiazolyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

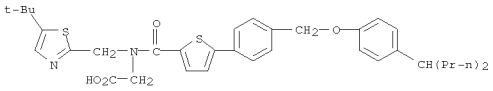


RN 776312-62-0 CAPLUS
CN Glycine, N-[(1-methyl-1H-benzimidazol-2-yl)methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]carbonyl]- (9CI) (CA INDEX NAME)

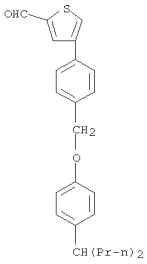


RN 776312-63-1 CAPLUS
CN Glycine, N-[[5-(1,1-dimethylethyl)-2-thiazolyl]methyl]-N-[[5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]-2-thienyl]carbonyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

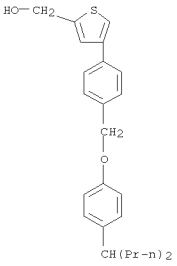


IT 776312-26-6P 776312-27-7P 776312-28-8P
776312-29-9P 776312-33-5P 776312-34-6P
776312-35-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azole compds. as PTP1B inhibitors for treatment of obesity
and diabetes)
RN 776312-26-6 CAPLUS
CN 2-Thiophenecarboxaldehyde, 4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)

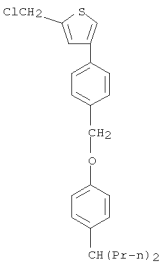


RN 776312-27-7 CAPLUS
CN 2-Thiophenemethanol, 4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI)
(CA INDEX NAME)

L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



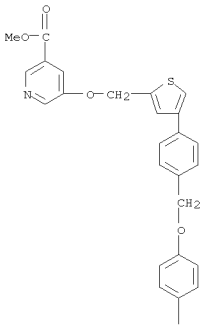
RN 776312-28-8 CAPLUS
CN Thiophene, 2-(chloromethyl)-4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)



RN 776312-29-9 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[[4-[4-[[4-(1-propylbutyl)phenoxy]methyl]phen
yl]-2-thienyl]methoxy]-, methyl ester (9CI) (CA INDEX NAME)

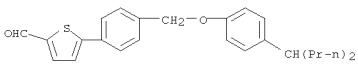
L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

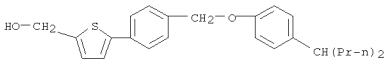


PAGE 2-A

RN 776312-33-5 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)

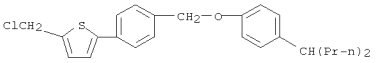


RN 776312-34-6 CAPLUS
CN 2-Thiophenemethanol, 5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI)
(CA INDEX NAME)



L18 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 776312-35-7 CAPLUS
CN Thiophene, 2-(chloromethyl)-5-[4-[[4-(1-propylbutyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:606460 CAPLUS
DOCUMENT NUMBER: 141:157025
TITLE: Preparation of thiophenes as PPAR modulators for treatment of diabetes mellitus, cardiovascular diseases, inflammatory diseases, and related disorders
INVENTOR(S): Mantlo, Nathan Bryan; Wang, Xiaodong; Zhu, Guoxin
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004063184 | A1 | 20040729 | WO 2003-US39118 | 20031231 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003296402 | A1 | 20040810 | AU 2003-296402 | 20031231 |
| EP 1583754 | A1 | 20051012 | EP 2003-815194 | 20031231 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| US 2006094768 | A1 | 20060504 | US 2005-540330 | 20050621 |
| PRIORITY APPLN. INFO.: | | | US 2003-438587P | P 20030106 |
| | | | WO 2003-US39118 | W 20031231 |

OTHER SOURCE(S): MARPAT 141:157025
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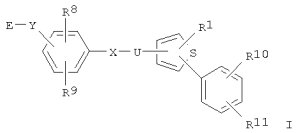
INSTANT APPLICATION

L18 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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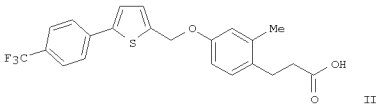


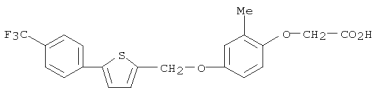
II

AB Title compds. I [wherein R1 = H, (un)substituted alkyl, alkenyl, (hetero)aryl(alkyl), arylheteroalkyl, cycloalkylaryl(alkyl); R8 = H, alkyl, alkylenyl, halo; R9 = H, (un)substituted alkyl, alkylenyl, halo, arylalkyl, heteroaryl, allyl, alkoxy, etc.; R10, R11 = independently H, OH, CN, NO2, halo, oxo, (un)substituted (halo)alkyl, alkoxy, cycloalkyl, (hetero)aryl(alkyl), cycloalkylaryl(alkyl), aryloxy, acyl, carboxy, amino, sulfamoyl, etc.; E = (un)substituted carboxy(methyl), tetrazolyl(methyl), nitriloalkyl, carboxamido(methyl), sulfonamido(methyl); U = (un)substituted aliphatic linker wherein one C of the linker is optionally replaced with O, NH, or S; X = bond, O, S, SO2, NH; Y = bond, CH2, NH; or stereoisomers, pharmaceutically acceptable salts, solvates, and hydrates thereof] were prepared as peroxisome proliferator activated receptor ( PPAR) modulators (no data). For example, coupling of 2-chloromethyl-5-(4-trifluoromethylphenyl)thiophene with 3-(4-hydroxy-2-methylphenyl)propionic acid Me ester in the presence of Cs2CO3 in acetonitrile, followed by saponification with NaOH in THF and MeOH provided II. I and their pharmaceutical compns. are expected to be effective in treating and preventing diabetes mellitus, cardiovascular disorders, inflammatory conditions, and other disorders (no data).

IT 728038-76-4P, [2-Methyl-4-[[5-(4-trifluoromethylphenyl)thien-2-yl]methoxy]phenoxy]acetic acid 728038-87-7P, (R)-[2-Methyl-4-[[2-[3-methyl-5-(4-trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-88-8P, (S)-[2-Methyl-4-[[2-[3-methyl-5-(4-trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid 728038-96-8P, [2-Methyl-4-[[2-[3-methyl-5-(4-trifluoromethylphenyl)thien-2-yl]propyl]sulfanyl]phenoxy]acetic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

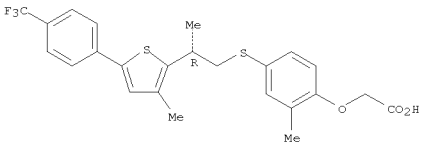
L18 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(PPAR modulator; prepn. of thiophenes as PPAR modulators for treatment of diabetes mellitus, cardiovascular diseases, inflammatory diseases, and other disorders)

RN 728038-76-4 CAPLUS
CN Acetic acid, [2-methyl-4-[[5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)



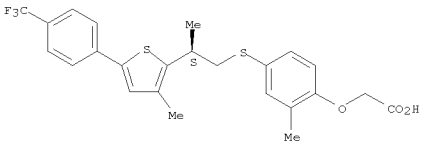
RN 728038-87-7 CAPLUS
CN Acetic acid, [2-methyl-4-[[(2R)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



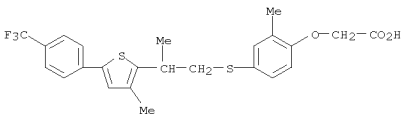
RN 728038-88-8 CAPLUS
CN Acetic acid, [2-methyl-4-[[(2S)-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 728038-96-8 CAPLUS
CN Acetic acid, [2-methyl-4-[[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]propyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:220310 CAPLUS
DOCUMENT NUMBER: 140:270625
TITLE: Preparation of [[[bis(biphenylyl)allyl]oxy]phenoxy]acetic acids and analogs as PPAR.delta. agonists for treatment of diabetes and related conditions
INVENTOR(S): Jeppesen, Lone; Mogensen, John Patrick; Pettersson, Ingrid; Sauerberg, Per
PATENT ASSIGNEE(S): Novo Nordisk A/s, Den.
SOURCE: PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004022533 | A1 | 20040318 | WO 2003-DK578 | 20030904 |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2499380 | A1 | 20040318 | CA 2003-2499380 | 20030904 |
| AU 2003260282 | A1 | 20040329 | AU 2003-260282 | 20030904 |
| US 2004143006 | A1 | 20040722 | US 2003-654699 | 20030904 |
| US 7091245 | B2 | 20060815 | | |
| EP 1537076 | A1 | 20050608 | EP 2003-793608 | 20030904 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003014335 | A | 20050726 | BR 2003-14335 | 20030904 |
| CN 1688540 | A | 20051026 | CN 2003-824179 | 20030904 |
| JP 2005538153 | T | 20051215 | JP 2004-533217 | 20030904 |
| MX 2005PA02411 | A | 20050527 | MX 2005-PA2411 | 20050302 |

PRIORITY APPLN. INFO.: DK 2002-1301 A 20020905
DK 2003-784 A 20030523
US 2002-409814P P 20020911
WO 2003-DK578 W 20030904

OTHER SOURCE(S): MARPAT 140:270625
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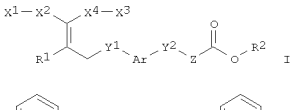
L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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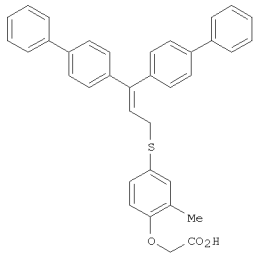


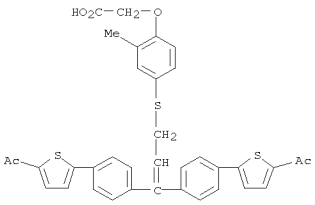
II

AB Title vinyl carboxylic acid derivs. I [wherein X1 and X3 = independently (un)substituted (hetero)aryl; X2 and X4 = independently (un)substituted (hetero)arylene; Ar = (un)substituted arylene; Y1 and Y2 = independently O or S; Z = (CH2)n; n = 1-3; R1 = H, halo, or (un)substituted (cyclo)alkyl, alkenyl, alkynyl, (hetero)aralkyl, (cyclo)alkoxy, aryloxy, (hetero)aralkoxy, (cyclo)alkylthio, arylthio; R2 = H, (cyclo)alkyl, alkenyl, alkynyl, or aryl; or pharmaceutically acceptable salts, solvates, tautomers, stereoisomers, or polymorphs thereof] were prepared as peroxisome proliferator-activated receptor δ ( PPAR.delta.) agonists (no data). For example, 4,4'-dibromobenzophenone was coupled with tri-Et phosphonoacetate in the presence of NaH in toluene to give Et 3,3-bis(4-bromophenyl)acrylate (73%). Reduction using DIBAL-H in THF (76%), followed by ADDP-catalyzed condensation with (4-mercapto-2-methylphenoxy)acetic acid Me ester in THF (88%) afforded [4-[3,3-bis(4-bromophenyl)allylsulfanyl]-2-methylphenoxy]acetic acid Me ester. Saponification (93%) and substitution with phenylboronic acid using KF, Pd2(dba)3, and Pd[P(t-Bu)3]2 in THF (53%) provided II. Also disclosed is the use of I and their pharmaceutical compns. for the treatment of PPAR.delta.-mediated conditions, such as diabetes, impaired glucose tolerance, insulin resistance, or obesity (no data).

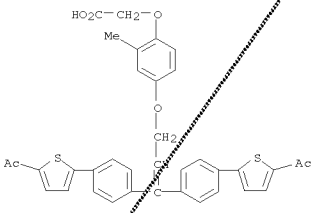
IT 673479-30-6P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]sulfanyl]-2-methylphenoxy]acetic acid 673479-31-7P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]oxy]-2-methylphenoxy]acetic acid 673479-32-8P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]oxy]-2-methylphenoxy]acetic acid 673479-33-9P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]sulfanyl]-2-methylphenoxy]acetic acid 673479-71-5P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]allyl]sulfanyl]-2-methylphenoxy]acetic acid 673479-72-6P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]allyl]oxy]-2-methylphenoxy]acetic acid 673479-73-7P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethylallyl]oxy]-2-methylphenoxy]acetic acid 673479-74-8P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethylallyl]sulfanyl]-2-methylphenoxy]acetic acid 673480-09-6P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]sulfanyl]phenoxy]acetic acid 673480-10-9P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]oxy]phenoxy]acetic acid 673480-11-0P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]oxy]phenoxy]acetic acid 673480-12-1P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]sulfanyl]phenoxy]acetic acid 673480-54-1P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]allyl]sulfanyl]phenoxy]acetic acid 673480-55-2P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]allyl]oxy]phenoxy]acetic acid 673480-56-3P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethylallyl]oxy]phenoxy]acetic acid 673480-57-4P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethylallyl]sulfanyl]phenoxy]acetic acid 673482-89-8P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethoxyallyl]sulfanyl]-2-methylphenoxy]acetic acid 673482-91-2P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethoxyallyl]oxy]-2-methylphenoxy]acetic acid 673483-89-1P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethoxyallyl]sulfanyl]-2-methylphenoxy]acetic acid 673483-91-5P, [4-[[3,3-Bis[4-(4-acetylthiophen-2-yl)phenyl]-2-ethoxyallyl]oxy]-2-methylphenoxy]acetic acid 673484-62-3P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]sulfanyl]-2-chlorophenoxy]acetic acid 673484-63-4P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]allyl]oxy]-2-chlorophenoxy]acetic acid 673484-64-5P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]oxy]-2-chlorophenoxy]acetic acid 673484-65-6P, [4-[[3,3-Bis[4-(5-acetylthiophen-2-yl)phenyl]-2-ethylallyl]sulfanyl]-2-chlorophenoxy]acetic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(PPAR.delta. agonist; prepn. of di(hetero)arylvinyl carboxylic acids as PPAR.delta. agonists for treatment of diabetes and related conditions)

RN 673479-30-6 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-propenyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

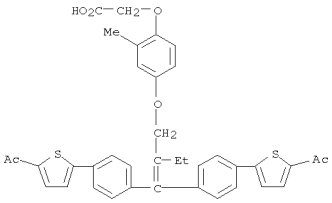


RN 673479-31-7 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-propenyl]oxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

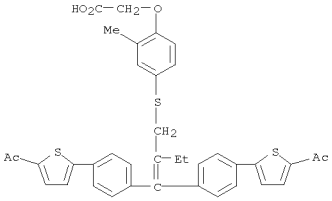


RN 673479-32-8 CAPLUS
CN Acetic acid, [4-[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

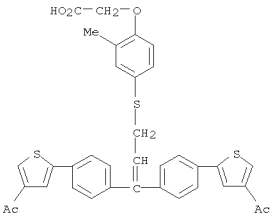


RN 673479-33-9 CAPLUS
CN Acetic acid,
[4-[[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butyl]thio
]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

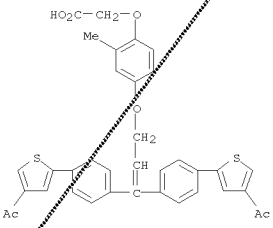


RN 673479-71-5 CAPLUS
CN Acetic acid,
[4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-propenyl]thio]-2-
methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

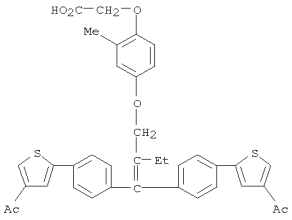


RN 673479-72-6 CAPLUS
CN Acetic acid,
[4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-propenyl]oxy]-2-
methylphenoxy]- (9CI) (CA INDEX NAME)

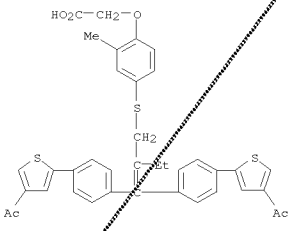


RN 673479-73-7 CAPLUS
CN Acetic acid, [4-[2-[bis[4-(4-acetyl-2-thienyl)phenyl]methylene]butoxy]-2-
methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

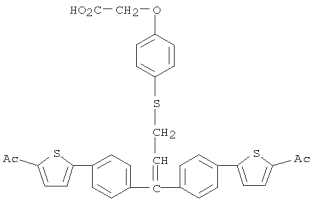


RN 673479-74-8 CAPLUS
CN Acetic acid,
[4-[[2-[bis[4-(4-acetyl-2-thienyl)phenyl]methylene]butyl]thio
]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

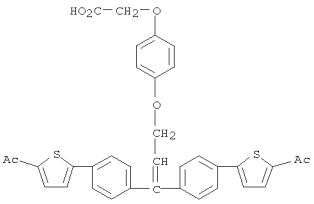


RN 673480-09-6 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-
propenyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

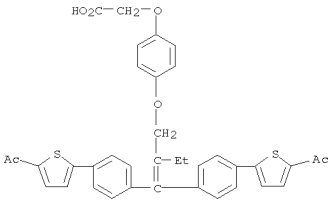


RN 673480-10-9 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-
propenyl]oxy]phenoxy]- (9CI) (CA INDEX NAME)

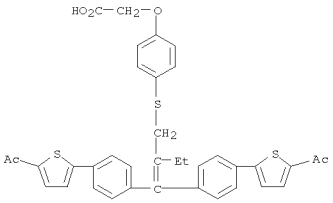


RN 673480-11-0 CAPLUS
CN Acetic acid,
[4-[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butoxy]phen
oxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

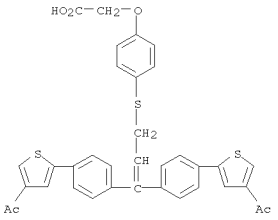


RN 673480-12-1 CAPLUS
CN Acetic acid, [4-[[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

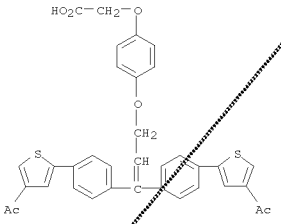


RN 673480-54-1 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-propenyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

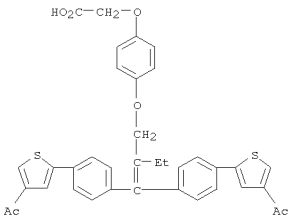


RN 673480-55-2 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-propenyl]oxy]phenoxy]- (9CI) (CA INDEX NAME)

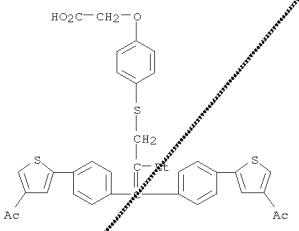


RN 673480-56-3 CAPLUS
CN Acetic acid, [4-[2-[bis[4-(4-acetyl-2-thienyl)phenyl]methylene]butoxy]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

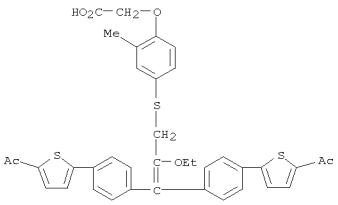


RN 673480-57-4 CAPLUS
CN Acetic acid, [4-[[2-[bis[4-(4-acetyl-2-thienyl)phenyl]methylene]butyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

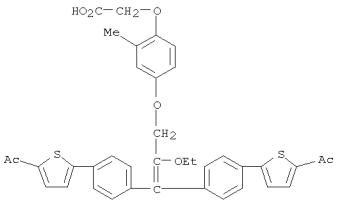


RN 673480-89-8 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-ethoxy-2-propenyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

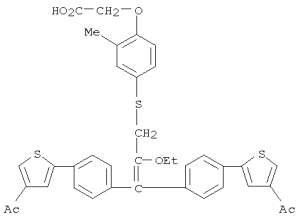


RN 673482-91-2 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-ethoxy-2-propenyl]oxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

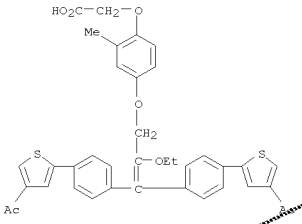


RN 673483-89-1 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-ethoxy-2-propenyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

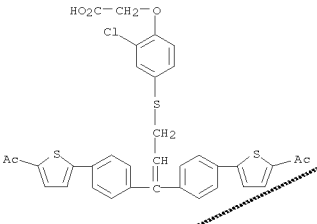


RN 673483-91-5 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(4-acetyl-2-thienyl)phenyl]-2-ethoxy-2-propenyl]oxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

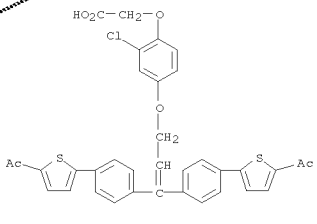


RN 673484-62-3 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-propenyl]thio]-2-chlorophenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

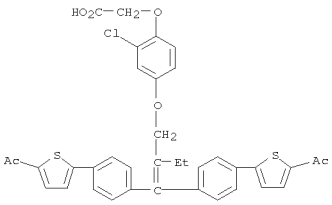


RN 673484-63-4 CAPLUS
CN Acetic acid, [4-[[3,3-bis[4-(5-acetyl-2-thienyl)phenyl]-2-propenyl]oxy]-2-chlorophenoxy]- (9CI) (CA INDEX NAME)

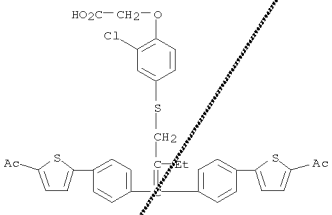


RN 673484-64-5 CAPLUS
CN Acetic acid, [4-[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butoxy]-2-chlorophenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 673484-65-6 CAPLUS
CN Acetic acid, [4-[[2-[bis[4-(5-acetyl-2-thienyl)phenyl]methylene]butyl]thio]-2-chlorophenoxy]- (9CI) (CA INDEX NAME)



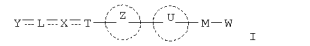
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:946252 CAPLUS
DOCUMENT NUMBER: 138:39276
TITLE: Preparation of heterocyclecarboxylic acid, benzoic acid, and phenylalkanoic acid derivatives as agonists of peroxisome proliferator-activated receptors ( PPAR)
INVENTOR(S): Matsuura, Fumiyoshi; Emori, Eita; Shinoda, Masanobu; Clark, Richard; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Inoue, Takashi; Miyashita, Sadakazu; Hihara, Taro
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 293 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002098840 | A1 | 20021212 | WO 2002-JP5511 | 20020604 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002306235 | A1 | 20021216 | AU 2002-306235 | 20020604 |
| EP 1394147 | A1 | 20040303 | EP 2002-733294 | 20020604 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2004214888 | A1 | 20041028 | US 2003-479427 | 20031203 |
| PRIORITY APPLN. INFO.: | | | JP 2001-168356 | A 20010604 |
| | | | WO 2002-JP5511 | W 20020604 |

OTHER SOURCE(S): MARPAT 138:39276
GI



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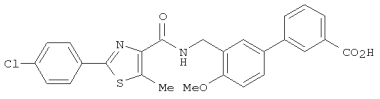


II

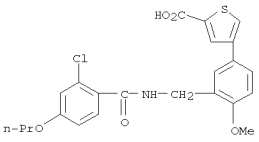
L18 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Novel carboxylic acid derivs. represented by the following general formula (I) [wherein L, M = a single bond, each (un)substituted C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; T = a single bond, each (un)substituted C1-3 alkylene, C2-3 alkenylene, or C2-3 alkynylene; W = CO2H; each solid line accompanied by a dotted line represents a single or double bond; X = a single bond, O, each N-(un)substituted NHCO-O, NHC(S)-O, O-CONH, O-C(S)NH, CONHO, C(S)NHO, ONHCO, ONHC(S), NHCO, NHC(S), CONH, C(S)NH, NHCONH, NHC(S)NH, NHSO2, or SO2NH, OSO2, SO2O, etc.; Y = 5 to 14-membered aromatic group or C3-7 alicyclic hydrocarbon group each optionally having ≥1 substituents or ≥1 heteroatoms; the ring Z or U = 5 to 14-membered aromatic group optionally having 1-4 substituents or ≥1 heteroatoms wherein a part of the ring is optionally saturated], salts or esters thereof, or hydrates thereof are prepared These compds. are dual agonists of PPAR α and γ or triple agonists of PPAR α, β(δ), and γ and useful as insulin resistance ameliorants, preventives and/or remedies for diabetes, fragile X syndrome, diabetes complications, hyperlipidemia, obesity, digestive tract diseases, and cancer. The digestive tract (gastrointestinal) diseases include (1) gastrointestinal inflammations such as ulcerative colitis, Crohn's disease, pancreatitis, and gastritis, (2) gastrointestinal proliferative diseases such as gastrointestinal benign tumor, polyp, hereditary polyposis, colon cancer, rectal cancer, and stomach cancer, and (3) gastrointestinal ulcer. They are also preventives and/or remedies for angina pectoris and myocardial infarction and sequelae thereof, senile dementia, and cerebral vascular dementia based on the improvement effects on energy metabolism These compds. are also useful as hypolipidemics, anti-osteoporosis agents, antiinflammatory agents, and immunomodulators. For example, 3-[4-methoxy-3-[[[[4-methyl-2-(4-chlorophenyl)-1,3-thiazol-5-yl]carbonyl]amino]methyl]phenyl]benzoic acid (II) showed EC50 of <0.0001, 0.176, and 0.711 for the transcription activity of human PPAR in host CV-1 cells transfected with GAL4-PPAR LBD chimera expression vector.

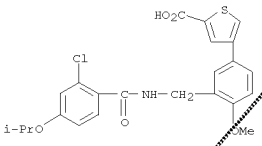
IT 478371-42-5P 478371-43-6P 478372-60-0P 478372-61-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclecarboxylic acid, benzoic acid, and phenylalkanoic acid derivs. as agonists of peroxisome proliferator-activated receptors (PPAR) for prevention and/or treatment of diseases)

RN 478371-42-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-4-methoxyphenyl]- (9CI) (CA INDEX NAME)

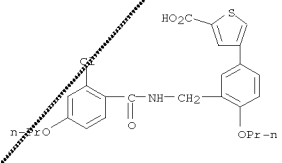
L18 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 478371-43-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-4-methoxyphenyl]- (9CI) (CA INDEX NAME)

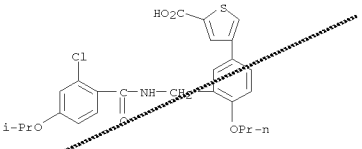


RN 478372-60-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-4-propoxyphenyl]- (9CI) (CA INDEX NAME)



RN 478372-61-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-4-propoxyphenyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:888731 CAPLUS
DOCUMENT NUMBER: 137:384743
TITLE: Preparation of furan and thiophene derivatives that activate human peroxisome proliferator activated receptors
INVENTOR(S): Beswick, Paul John; Hamlett, Christopher Charles Frederick; Patel, Vipulkumar; Sierra, Michael Lawrence; Ramsden, Nigel Grahame
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002092590 | A1 | 20021121 | WO 2002-GB2152 | 20020509 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2446797 | A1 | 20021121 | CA 2002-2446797 | 20020509 |
| AU 2002253385 | A1 | 20021125 | AU 2002-253385 | 20020509 |
| EP 1392674 | A1 | 20040303 | EP 2002-722506 | 20020509 |
| EP 1392674 | B1 | 20050810 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| HU 200304051 | A2 | 20040428 | HU 2003-4051 | 20020509 |
| CN 1507442 | A | 20040623 | CN 2002-809694 | 20020509 |
| BR 2002009468 | A | 20040803 | BR 2002-9468 | 20020509 |
| JP 2004534035 | T | 20041111 | JP 2002-589475 | 20020509 |
| AT 301649 | T | 20050815 | AT 2002-722506 | 20020509 |
| ES 2247322 | T3 | 20060301 | ES 2002-2722506 | 20020509 |
| IN 2003KN01287 | A | 20060317 | IN 2003-KN1287 | 20031009 |
| ZA 2003008352 | A | 20050127 | ZA 2003-8352 | 20031027 |
| NO 2003004986 | A | 20031110 | NO 2003-4986 | 20031110 |
| MX 2003PA10285 | A | 20040309 | MX 2003-PA10285 | 20031111 |
| US 2004157890 | A1 | 20040812 | US 2004-476194 | 20040323 |
| US 7091237 | B2 | 20060815 | | |

PRIORITY APPLN. INFO.: GB 2001-11523 A 20010511
WO 2002-GB2152 W 20020509

OTHER SOURCE(S): MARPAT 137:384743
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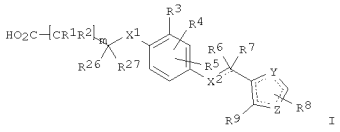
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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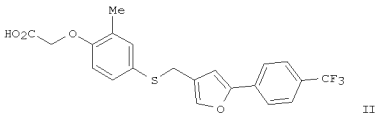


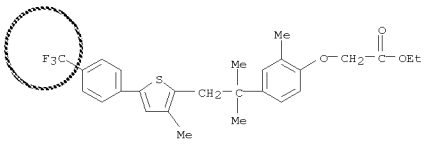
II

AB The title compds. [I; X1 = O, S, NH, NMe, alkyl; R1, R2 = H, alkyl; R3-R5 = H, Me, OMe, CF3, halo; m = 0-3; X2 = (CR10R11)n, O, S, OCH2; n = 1-2; R6, R7, R10, R11 = H, F, alkyl, etc.; one of Y and Z = CH, the other = S, O with the proviso that Y cannot be substituted and Z can only be substituted when it is carbon; R8 = (un)substituted Ph, pyridyl (wherein the N is in position 2 or 3) with the provision that when R3 = pyridyl, the N is unsubstituted; R9 = alkyl, CF3, CH2D (D = N-substituted piperazino, furyl, piperidino, etc.); R26, R27 = H, alkyl; or R26 and R27, together with the carbon atom to which they are bonded form a 3-5 membered cycloalkyl ring] and their pharmaceutically acceptable salts, useful for the treatment of a hPPAR mediated disease or condition such as dyslipidemia, syndrome X, heart failure, hypercholesteremia, cardiovascular disease, type II diabetes mellitus, type I diabetes, insulin resistance, hyperlipidemia, obesity, anorexia bulimia, inflammation and anorexia nervosa, were prepared Thus, coupling {5-[4-(trilfuoromethyl)phenyl]-3-furyl}methanol with Et (4-mercapto-2-methylphenoxy)acetate followed by hydrolysis of the resulting ester afforded the acid II.

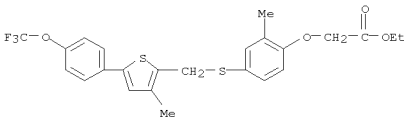
IT 476154-81-1P 476154-87-7P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-81-1 CAPLUS
CN Acetic acid, [4-[1,1-dimethyl-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thienyl]ethyl]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



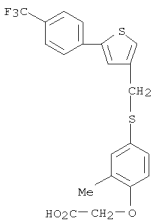
RN 476154-87-7 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methyl]thio]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



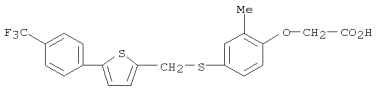
IT 476154-11-7P 476154-12-8P 476154-13-9P
476154-14-0P 476154-22-0P 476154-25-3P
476154-29-7P 476154-31-1P 476154-55-9P
476154-56-0P 476154-57-1P 476154-58-2P
476154-59-3P 476154-60-6P 476154-61-7P
476154-62-8P 476154-67-3P 476154-71-9P
476154-72-0P 476154-75-3P 476154-76-4P
476154-80-0P 476154-82-2P 476154-88-8P
476154-89-9P 476154-90-2P 476154-91-3P
476154-92-4P 476154-93-5P 476154-94-6P
476154-95-7P 476154-96-8P 476154-97-9P
476154-98-0P 476154-99-1P 476155-00-7P
476155-01-8P 476155-02-9P 476155-03-0P
476155-04-1P 476155-05-2P 476155-09-6P
476155-10-9P 476155-11-0P 476156-38-4P
476156-52-2P 476156-54-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

RN 476154-11-7 CAPLUS
CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

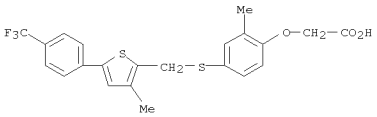
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476154-12-8 CAPLUS
CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

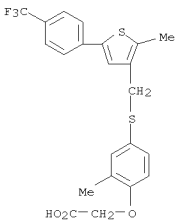


RN 476154-13-9 CAPLUS
CN Acetic acid, 2-[2-methyl-4-[[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (CA INDEX NAME)

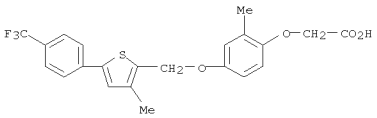


RN 476154-14-0 CAPLUS
CN Acetic acid, [2-methyl-4-[[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

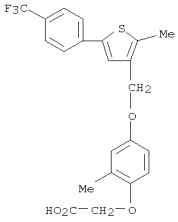
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476154-22-0 CAPLUS
CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)



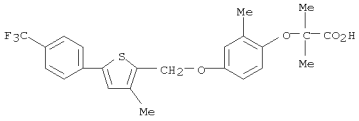
RN 476154-25-3 CAPLUS
CN Acetic acid, [2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)



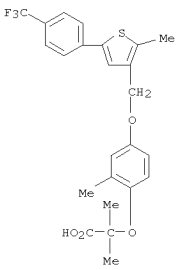
RN 476154-29-7 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NAME)

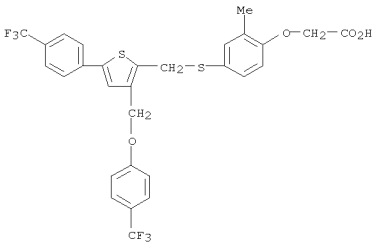


RN 476154-31-1 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[[2-methyl-5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

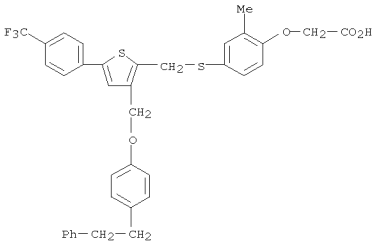


RN 476154-55-9 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

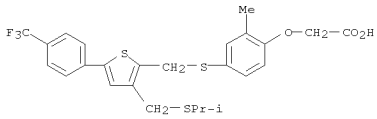


RN 476154-59-3 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[4-(2-phenylethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

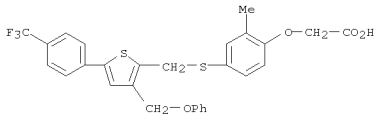


RN 476154-60-6 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[(4'-methyl[1,1'-biphenyl]-4-yl)oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

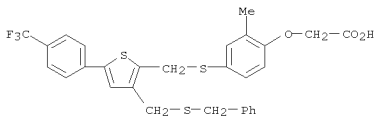
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476154-56-0 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-(phenoxymethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

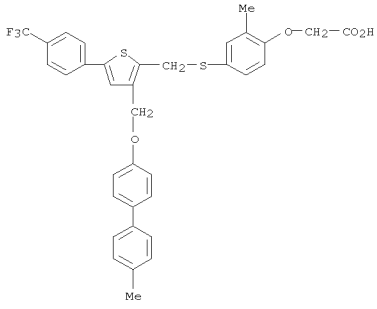


RN 476154-57-1 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[(phenylmethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

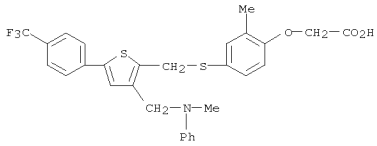


RN 476154-58-2 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[4-(trifluoromethyl)phenoxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

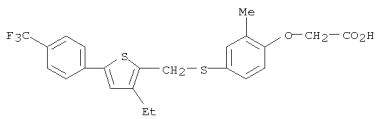
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476154-61-7 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[(methylphenylamino)methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

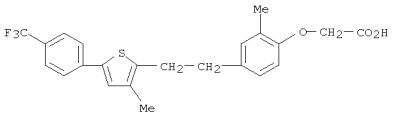


RN 476154-62-8 CAPLUS
CN Acetic acid, [4-[[[3-ethyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

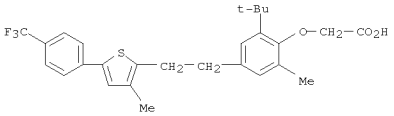


RN 476154-67-3 CAPLUS

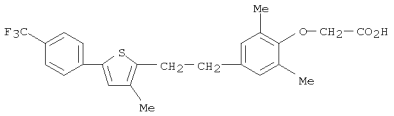
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Acetic acid, [2-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)



RN 476154-71-9 CAPLUS
CN Acetic acid, [2-(1,1-dimethylethyl)-6-methyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

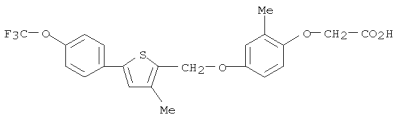


RN 476154-72-0 CAPLUS
CN Acetic acid, [2,6-dimethyl-4-[2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]phenoxy]- (9CI) (CA INDEX NAME)

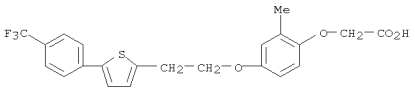


RN 476154-75-3 CAPLUS
CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

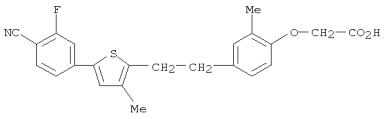
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476154-76-4 CAPLUS
CN Acetic acid, [2-methyl-4-[2-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

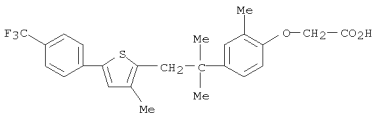


RN 476154-80-0 CAPLUS
CN Acetic acid, [4-[2-[5-(4-cyano-3-fluorophenyl)-3-methyl-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

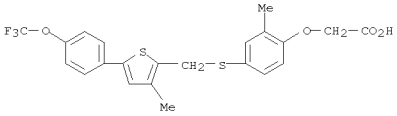


RN 476154-82-2 CAPLUS
CN Acetic acid, [4-[1,1-dimethyl-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethyl]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

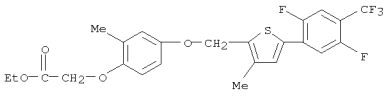
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



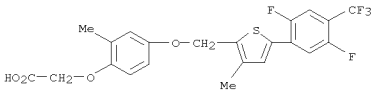
RN 476154-88-8 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-methyl-5-[4-(trifluoromethoxy)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



RN 476154-89-9 CAPLUS
CN Acetic acid, [4-[[5-[2,5-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

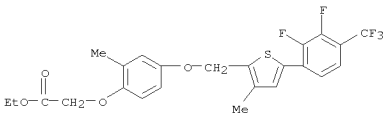


RN 476154-90-2 CAPLUS
CN Acetic acid, [4-[[5-[2,5-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

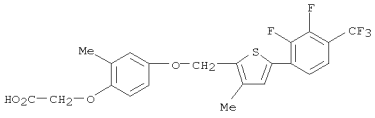


RN 476154-91-3 CAPLUS
CN Acetic acid, [4-[[5-[2,3-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

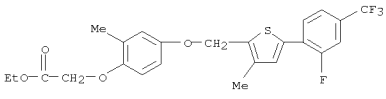
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



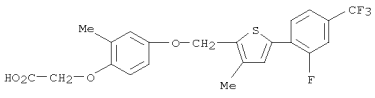
RN 476154-92-4 CAPLUS
CN Acetic acid, [4-[[5-[2,3-difluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)



RN 476154-93-5 CAPLUS
CN Acetic acid, [4-[[5-[2-fluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

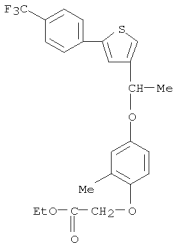


RN 476154-94-6 CAPLUS
CN Acetic acid, [4-[[5-[2-fluoro-4-(trifluoromethyl)phenyl]-3-methyl-2-thienyl]methoxy]-2-methylphenoxy]- (9CI) (CA INDEX NAME)

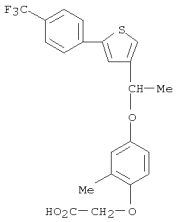


RN 476154-95-7 CAPLUS
CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-3-thienyl]ethoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

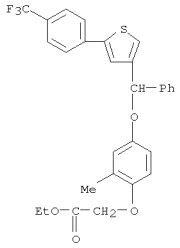


RN 476154-96-8 CAPLUS
CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-3-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

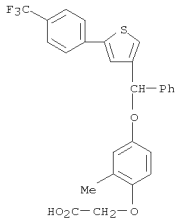


RN 476154-97-9 CAPLUS
CN Acetic acid, [2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



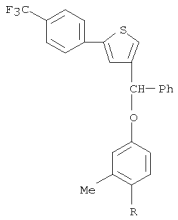
RN 476154-98-0 CAPLUS
CN Acetic acid, [2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)



RN 476154-99-1 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

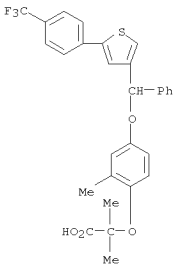
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



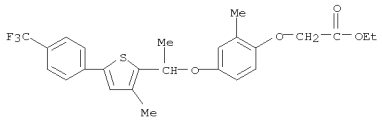
PAGE 2-A

RN 476155-00-7 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[phenyl[5-[4-(trifluoromethyl)phenyl]-3-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

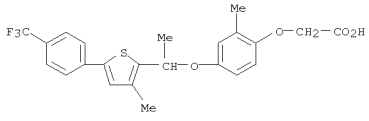


RN 476155-01-8 CAPLUS

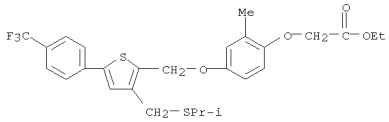
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Acetic acid, [2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 476155-02-9 CAPLUS
CN Acetic acid, [2-methyl-4-[1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

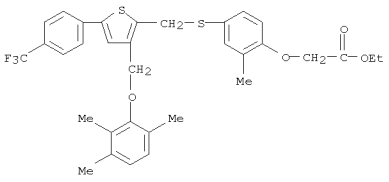


RN 476155-03-0 CAPLUS
CN Acetic acid, [2-methyl-4-[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

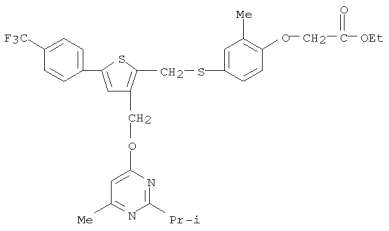


RN 476155-04-1 CAPLUS
CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-[(2,3,6-trimethylphenoxy)methyl]-2-thienyl]methyl]thio]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

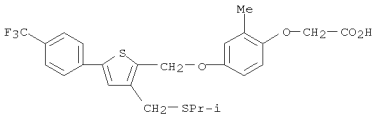
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



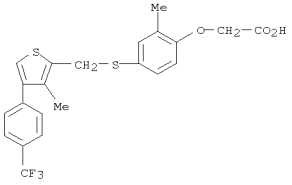
RN 476155-05-2 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



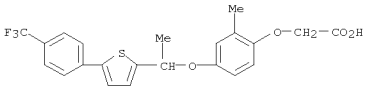
RN 476155-09-6 CAPLUS
CN Acetic acid, [2-methyl-4-[[3-[[(1-methylethyl)thio]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)



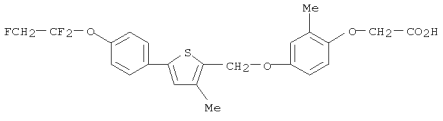
L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 476156-52-2 CAPLUS
CN Acetic acid, [2-methyl-4-[1-[5-[4-(trifluoromethyl)phenyl]-2-thienyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)



RN 476156-54-4 CAPLUS
CN Acetic acid, [2-methyl-4-[[3-methyl-5-[4-(1,1,2-trifluoroethoxy)phenyl]-2-thienyl]methoxy]phenoxy]- (9CI) (CA INDEX NAME)

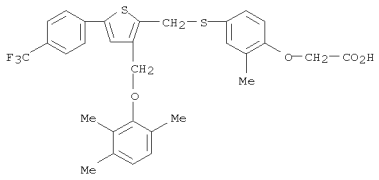


IT 476156-01-1P 476156-03-3P 476156-05-5P
476156-07-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of furan and thiophene derivs. that activate human peroxisome proliferator activated receptors)

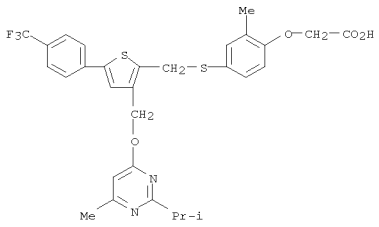
RN 476156-01-1 CAPLUS
CN Benzonitrile, 2-fluoro-4-[4-methyl-5-[2-[3-methyl-4-[(4-methyl-2,6,7-trioxabicyclo[2.2.2]oct-1-yl)methoxy]phenyl]ethyl]-2-thienyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 476155-10-9 CAPLUS
CN Acetic acid, [2-methyl-4-[[[5-[4-(trifluoromethyl)phenyl]-3-[(2,3,6-trimethylphenoxy)methyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



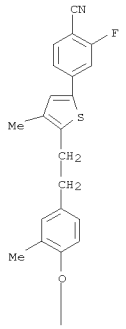
RN 476155-11-0 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-[[[6-methyl-2-(1-methylethyl)-4-pyrimidinyl]oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



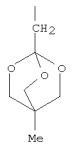
RN 476156-38-4 CAPLUS
CN Acetic acid, [2-methyl-4-[[[3-methyl-4-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]phenoxy]- (9CI) (CA INDEX NAME)

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

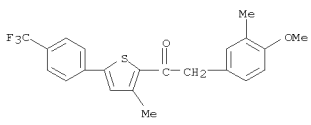
PAGE 1-A



PAGE 2-A

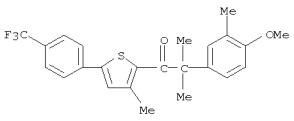


RN 476156-03-3 CAPLUS
CN Ethanone, 2-(4-methoxy-3-methylphenyl)-1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]- (9CI) (CA INDEX NAME)

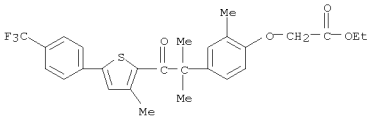


RN 476156-05-5 CAPLUS

L18 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1-Propanone, 2-(4-methoxy-3-methylphenyl)-2-methyl-1-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]- (9CI) (CA INDEX NAME)



RN 476156-07-7 CAPLUS
CN Acetic acid, [4-[1,1-dimethyl-2-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-2-oxoethyl]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:793403 CAPLUS
DOCUMENT NUMBER: 137:310931
TITLE: Preparation of phenylalkanoic acid derivatives as preventive or remedial agents for digestive tract diseases
INVENTOR(S): Horizoe, Tatsuo; Shinoda, Masanobu; Emori, Eita; Matsuura, Fumiyoshi; Kaneko, Toshihiko; Ohi, Norihito; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Miyashita, Sadakazu; Hihara, Taro; Seiki, Takashi; Clark, Richard; Harada, Hitoshi
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 344 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002080899 | A1 | 20021017 | WO 2002-JP3006 | 20020327 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002242989 | A1 | 20021021 | AU 2002-242989 | 20020327 |
| PRIORITY APPLN. INFO.: | | | JP 2001-101465 | A 20010330 |
| | | | JP 2001-105131 | A 20010403 |
| | | | WO 2002-JP3006 | W 20020327 |

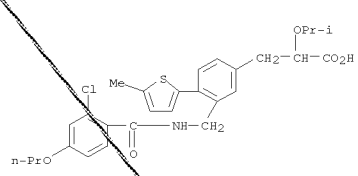
OTHER SOURCE(S): MARPAT 137:310931
GI

AB Disclosed is a preventive/remedy for digestive tract or inflammatory diseases, which contains as the active ingredient a novel carboxylic acid derivative represented by the following formula [I; R1 = H, OH, each (un)substituted C1-6 alkyl, C1-6 alkoxy, C1-6 alkylthio, C1-6 hydroxyalkyl, C1-6 hydroxyalkoxy, C1-6 hydroxyalkylthio, C1-6 aminoalkyl,

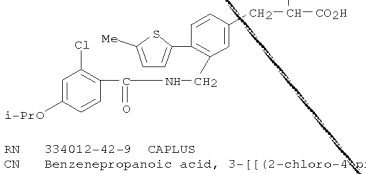
L18 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
C1-6 aminoalkoxy, C1-6 aminoalkylthio, C2-12 alkoxyalkyl, C3-7 cycloalkyl, C3-7 cycloalkyloxy, C3-7 cycloalkylthio, C2-6 alkenyl, C2-6 alkenyloxy, or C2-6 alkenylthio, etc.; L = a single or double bond, each (un)substituted C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; M = a single bond, each (un)substituted C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; T = a single bond, each (un)substituted C1-3 alkylene, C2-3 alkenylene, or C2-3 alkynylene; W = 2,4-dioxothiazolidin-5-yl, 2,4-dioxothiazolidin-5-ylidene, carboxy, (un)substituted CONH2; X = O, (un)substituted C2-6 alkenylene, hydroxymethylene, CO, CS, N-(un)substituted CONH, NHCO, SO2NH, NHSO2, or NHCONH (Q = O, S); Y = (un)substituted C5-12 arom. hydrocarbyl or C3-7 aliph. hydrocarbyl optionally contg. ≥1 heteroatoms; ring Z = C5-6 arom. hydrocarbyl; Y = (un)substituted arom. hydrocarbon group optionally contg. ≥1 heteroatoms; some provisos given], a salt of the deriv., or a hydrate of either. The above digestive tract diseases include (1) inflammatory digestive tract diseases such as ulcerous colitis, Crohn's disease, pancreatitis, and gastritis, (2) digestive tract proliferative diseases such as digestive tract benign rumors, digestive tract polyp, hereditary (genetic) polyposis syndromes, colon cancer, rectum cancer, and stomach cancer, and (3) digestive tract ulcerous diseases such as duodenal ulcer, stomach ulcer, esophagus ulcer, regurgitant esophagitis, stress ulcer or erosion, erosion caused by drugs, and Zollinger-Ellison syndromes. The above inflammatory diseases include arthritic rheumatism, multiple sclerosis, immunodeficiency, cachexia, osteoarthritis, osteoporosis, asthma, and allergy. The compds. I are triple agonists for PPAR (peroxisome proliferator-activated receptor) α, β, and γ subtype. Thus,

2-isopropoxy-3-[4-methoxy-3-[[[4-(trifluoromethyl)benzyl]amino]carbonyl]phenyl]propanoic acid in vitro showed the transcription activity for PPAR.alpha., β, and γ with EC50 of 0.08, 2.513, and 0.382 μM, resp., in CV-1 cell. (2S)-3-[3-[[(2,4-dichlorobenzoyl)amino]methyl]-4-methoxyphenyl]-2-isopropoxypropanoic acid at 1 mg/kg/day p.o. for 3 days showed a disease activity index based on diarrhea, bloody excrement, and wt. loss (DAI) of 2.0±0.3 in mice suffering from colitis induced by dextran sulfate sodium salt vs. 2.8±0.2 for the control group and 2.1±0.3 for the mice treated with rosiglitazone at 30 mg/kg/day. Many compds. prepd. do not possess the thiazolidine skeleton and thereby may completely avoid toxicity such as liver disorder which was noted in the past as a problem for compds. having PPAR.gamma. agonist activity.
IT 334012-36-1P 334012-37-2P 334012-42-9P
334012-43-0P 334012-54-3P 334012-60-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylalkanoic acid derivs. as peroxisome proliferator-activated receptor agonists and remedial or preventive agents for digestive tract or inflammatory diseases)
RN 334012-36-1 CAPLUS
CN Benzenepropanoic acid, 3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

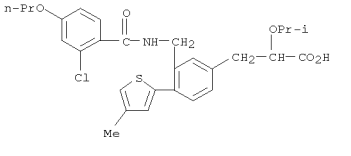
L18 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 334012-37-2 CAPLUS
CN Benzenepropanoic acid, 3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

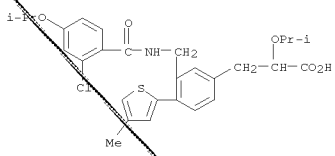


RN 334012-42-9 CAPLUS
CN Benzenepropanoic acid, 3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

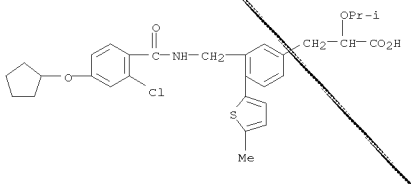


RN 334012-43-0 CAPLUS
CN Benzenepropanoic acid, 3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

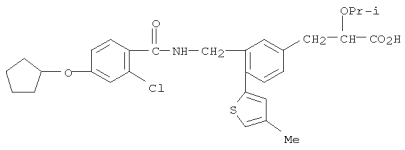
L18 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 334012-54-3 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(cyclopentyloxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



RN 334012-60-1 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(cyclopentyloxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L18 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L18 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:265369 CAPLUS
DOCUMENT NUMBER: 134:295620
TITLE: Preparation and effect of 4-methoxyphenylpropionic acid derivatives useful in insulin resistance improvement
INVENTOR(S): Shinoda, Masanobu; Emori, Eita; Matsuura, Fumiyoshi; Kaneko, Toshihiko; Ohi, Norihito; Kasai, Shunji; Yoshitomi, Hideki; Yamazaki, Kazuto; Miyashita, Sadakazu; Hibara, Taro; Seiki, Hisashi; Clark, Richard; Harada, Hitoshi
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 350 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001025181 | A1 | 20010412 | WO 2000-JP6788 | 20000929 |
| W: AU, BR, CA, CN, HU, IL, JP, KR, MX, NO, NZ, RU, US, ZA | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| TW 262185 | B | 20060921 | TW 2000-89120087 | 20000928 |
| CA 2385081 | A1 | 20010412 | CA 2000-2385081 | 20000929 |
| AU 200074499 | A | 20010510 | AU 2000-74499 | 20000929 |
| AU 776267 | B2 | 20040902 | | |
| EP 1216980 | A1 | 20020626 | EP 2000-962993 | 20000929 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY | | | | |
| NZ 517719 | A | 20041029 | NZ 2000-517719 | 20000929 |
| US 6884821 | B1 | 20050426 | US 2002-88916 | 20000929 |

PRIORITY APPLN. INFO.: JP 1999-282079 A 19991001
JP 1999-369442 A 19991227
JP 2000-38795 A 20000216
JP 2000-104260 A 20000406
WO 2000-JP6788 W 20000929

OTHER SOURCE(S): MARPAT 134:295620
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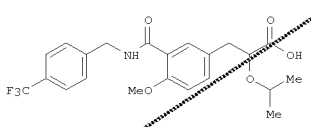
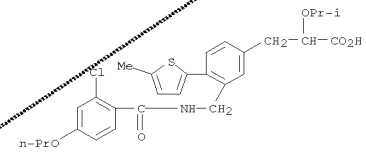
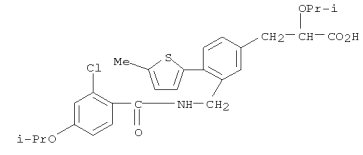


L18 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title compds. [Y:L:X:TZM:CWR1; R1 is hydrogen, hydroxyl, alkyl; L is single bond, double bond, alkylene; M is single bond, alkylene; T is single bond, alkylene; W is carboxyl, amide; X is oxygen, alkenylene; Y is aromatic hydrocarbon; Z is aromatic hydrocarbon; colon represents single, or double bond], salts, esters, and hydrates are prepared and are useful in prevention or treatment of diabetes and X-syndrome. Thus, the title compound I was prepared and biol. tested.
IT 334012-36-1P 334012-37-2P 334012-42-9P
334012-43-0P 334012-54-3P 334012-60-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and effect of methoxyphenylpropionic acid derivs. useful in insulin resistance improvement as PPAR agonists)
RN 334012-36-1 CAPLUS
CN Benzenepropanoic acid, 3-[[[2-chloro-4-propoxybenzoyl)amino]methyl]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

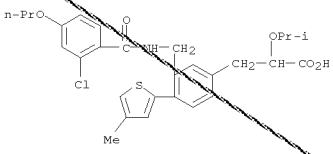


RN 334012-37-2 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

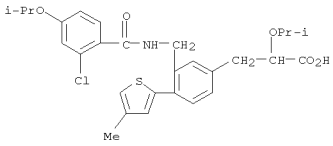


RN 334012-42-9 CAPLUS
CN Benzenepropanoic acid, 3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

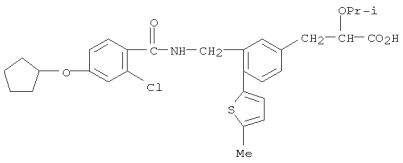
L18 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 334012-43-0 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

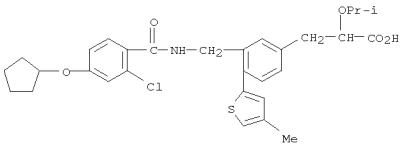


RN 334012-54-3 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(cyclopentyloxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



RN 334012-60-1 CAPLUS
CN Benzenepropanoic acid,
3-[[[2-chloro-4-(cyclopentyloxy)benzoyl]amino]methy
l]-α-(1-methylethoxy)-4-(4-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

L18 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:167982 CAPLUS
DOCUMENT NUMBER: 134:207811
TITLE: Preparation of biaryloxa(thia)zole derivatives as PPAR modulators
INVENTOR(S): Brooks, Dawn A.; Rito, Christopher J.; Shuker, Anthony
J.; Dominianni, Samuel J.; Warshawsky, Alan M.; Gossett, Lynn S.; Matthews, Donald P.; Hay, David A.; Ardecky, Robert J.; Michellys, Pierre-Yves; Tyhonas, John S.
PATENT ASSIGNEE(S): Eli Lilly and Company, USA; Ligand Pharmaceuticals Incorporated
SOURCE: PCT Int. Appl., 232 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

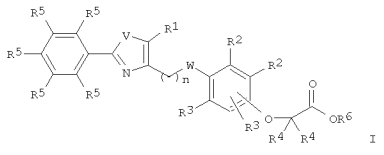
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001016120 | A1 | 20010308 | WO 2000-US23358 | 20000823 |
| WO 2001016120 | A9 | 20020711 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2382966 | A1 | 20010308 | CA 2000-2382966 | 20000823 |
| EP 1206457 | A1 | 20020522 | EP 2000-959401 | 20000823 |
| EP 1206457 | B1 | 20031015 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL | | | | |
| US 6417212 | B1 | 20020709 | US 2000-644457 | 20000823 |
| JP 2003508389 | T | 20030304 | JP 2001-519687 | 20000823 |
| AT 252091 | T | 20031115 | AT 2000-959401 | 20000823 |
| PT 1206457 | T | 20040331 | PT 2000-959401 | 20000823 |
| ES 2204684 | T3 | 20040501 | ES 2000-959401 | 20000823 |
| US 2003045558 | A1 | 20030306 | US 2002-121373 | 20020411 |
| US 6610696 | B2 | 20030826 | | |
| US 2004019090 | A1 | 20040129 | US 2003-434425 | 20030507 |
| US 6825222 | B2 | 20041130 | | |

PRIORITY APPLN. INFO.:

| | | |
|---|---|---|
| US 1999-151162P | P | 19990827 |
| US 2000-644457 | A3 | 20000823 |
| WO 2000-US23358 | W | 20000823 |
| US 2002-121373 | A3 | 20020411 |

OTHER SOURCE(S): MARPAT 134:207811
GI

L18 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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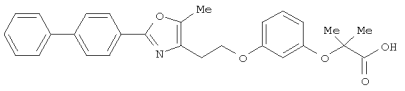


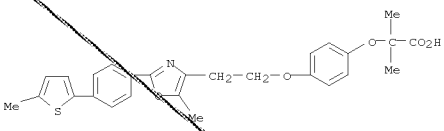
II

AB Title compds. (I) [wherein n = 2-4; V = O or S; W = O, S, or SO2; R1 = H, alkyl, Ph, or CF3; R2 = independently H, (cyclo)alkyl, cycloalkylalkyl, aryl(alkyl), or together with the Ph to which they are bound form naphthyl or 1,2,3,4-tetrahydronaphthyl; R3 = independently H, (cyclo)alkyl, cycloalkylalkyl, or aryl(alkyl); R4 = independently H, alkyl, aryl, or benzyl; R5 = independently H or (un)substituted (hetero)aryl, provided that at least one R5 = (un)substituted (hetero)aryl; and R6 = H or (amino)alkyl] were prepared as are modulators of peroxisome proliferator activated receptors (PPARs) and are useful in the treatment of type II diabetes and cardiovascular diseases. For example, a mixture of the toluene-4-sulfonic acid 2-(2-(biphenyl-4-yl)-5-methyloxazol-4-yl)ethyl ester and 2-(3-hydroxyphenoxy)-2-methylpropanoic acid Et ester was heated at 55°C in DMF for 18 h and the intermediate deesterified using NaOH in EtOH and THF to afford the title compound II. II bound to human PPAR.alpha. and PPAR.gamma. with IC50 values of 97 nM and 532 nM, resp., and activated human PPAR.alpha. and PPAR.gamma. with efficacies of 97% and 70%, resp. In assays evaluating triglyceride and cholesterol levels in mice transgenic for human apoAI, administration of II reduced triglyceride serum levels by 60.5% and increased HDLc serum levels by 204%. Glucose normalization of 95% was attained in male diabetic (db/db) mice dosed with II.

IT 328918-74-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of biaryl oxa(thia)zole PPAR modulators by coupling biaryloxazolylalkyl tosylates with alcs. or thiols)

RN 328918-74-7 CAPLUS
CN Propanoic acid, 2-methyl-2-[4-[2-[5-methyl-2-[4-(5-methyl-2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]- (9CI) (CA INDEX NAME)

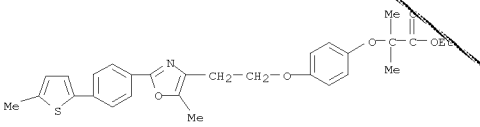
L18 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



IT 328920-02-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of biaryl oxa(thia)zole PPAR modulators by coupling biaryloxazolylalkyl tosylates with alcs. or thiols)

RN 328920-02-1 CAPLUS

CN Propanoic acid, 2-methyl-2-[4-[2-[2-methyl-2-[4-(5-methyl-2-thienyl)phenyl]-4-oxazolyl]ethoxy]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

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L8        12969 S L7 FULL  SUB=L5
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L13         937 S L11 FULL  SUB=L10
L14         428 S L12 FULL  SUB=L10

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L17         262 S L15 OR L16
L18          12 S L17 AND PPAR

=> s l17 not l18
L19        250 L17 NOT L18

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             0 AP<2004
L20          0 L19 AND AP<2004

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L19 ANSWER 1 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:673443 CAPLUS
DOCUMENT NUMBER: 147:95531
TITLE: Preparation of thiophene derivatives as factor XIa inhibitors
INVENTOR(S): Han, Wei
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 145pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007070816 | A2 | 20070621 | WO 2006-US61970 | 20061213 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2005-750131P P 20051214

OTHER SOURCE(S): MARPAT 147:95531
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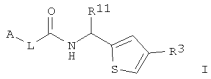

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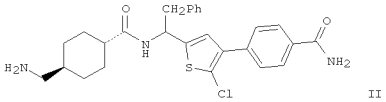
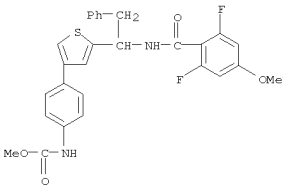


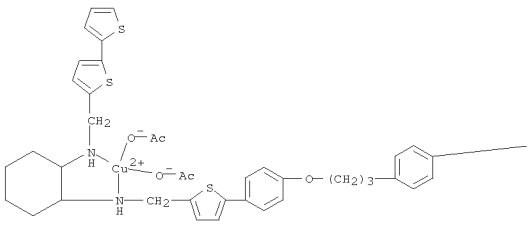
II

L19 ANSWER 1 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
AB The title thiophene derivs. I [wherein A = (un)substituted cycloalkyl, cycloalkenyl, Ph, naphthyl, or heterocyclyl; L = a bond, CH2, CH2CH2, OCH2, etc.; the thiophene ring is optionally further substituted with 0-2 R4; R3 = (un)substituted Ph, naphthyl, or heterocyclyl(alkyl); R4 = independently H, F, Cl, Br, I, NO2, etc.; R11 = (un)substituted (cyclo)alkyl, alkenyl, alkynyl, etc.], or stereoisomers, tautomers, pharmaceutically acceptable salts, or solvates thereof were prepared as factor XIa inhibitors. For example, II•TFA was prepared in a multi-step synthesis. Inhibitory activity were tested (no data). The compds. are useful for treating thromboembolic and/or inflammatory disorders.
IT 942119-86-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of thiophene derivs. as factor XIa inhibitors)
RN 942119-86-0 CAPLUS
CN Carbamic acid, N-[4-[5-[1-[(2,6-difluoro-4-methoxybenzoyl)amino]-2-phenylethyl]-3-thienyl]phenyl]-, methyl ester (CA INDEX NAME)



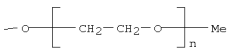
L19 ANSWER 2 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:501976 CAPLUS
DOCUMENT NUMBER: 147:143034
TITLE: Recoverable PEG-Supported Copper Catalyst for Highly Stereocontrolled Nitroaldol Condensation
AUTHOR(S): Bandini, Marco; Benaglia, Maurizio; Sinisi, Riccardo; Tommasi, Simona; Umani-Ronchi, Achille
CORPORATE SOURCE: Dipartimento di Chimica G. Ciamician, Universita di Bologna, Bologna, 40126, Italy
SOURCE: Organic Letters (2007), 9(11), 2151-2153
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 147:143034
AB A new Cu(OAc)2 complex with poly(ethylene glycol)-modified unsym. 1,2-bis(thienylmethylamino)cyclohexane smoothly catalyzes a base-free nitroaldol condensation of aldehydes RCHO (R = Me3C, cyclohexyl, Ph, 4-FC6H4, n-heptyl, etc.) with nitromethane in a highly enantioselective manner (ee up to 93%) in reagent-grade solvent and in the presence of air.
Effective recovery and recycling (up to five runs) of supported catalysts are documented.
IT 943348-25-2P
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(asym. synthesis of vicinal nitro alcs. via highly stereocontrolled nitroaldol condensation of aldehydes with nitromethane using recoverable poly(ethylene glycol)-supported copper catalyst)
RN 943348-25-2 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-methyl-ω-hydroxy-, ether with (SP-4-3)-bis(acetato-κO)[4-[3-[4-[5-[[[(1R,2R)-2-[([2,2'-bithiophen]-5-ylmethyl)amino-κN]cyclohexyl]amino-κN]methyl]-2-thienyl]phenoxy]propyl]phenol]copper (CA INDEX NAME)

PAGE 1-A



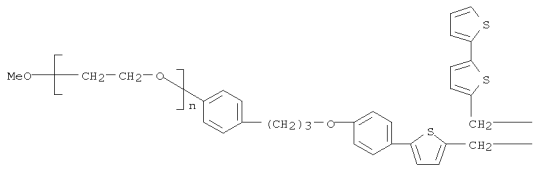
L19 ANSWER 2 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



IT 943241-69-8
RL: RCT (Reactant); RACT (Reactant or reagent)
(asym. synthesis of vicinal nitro alcs. via highly stereocontrolled nitroaldol condensation of aldehydes with nitromethane using recoverable poly(ethylene glycol)-supported copper catalyst)
RN 943241-69-8 CAPLUS
CN Poly(oxy-1,2-ethanediyl), α-[4-[3-[4-[5-[[[(1R,2R)-2-[([2,2'-bithiophen]-5-ylmethyl)amino]cyclohexyl]amino]methyl]-2-thienyl]phenoxy]propyl]phenyl]-ω-methoxy- (CA INDEX NAME)

PAGE 1-A



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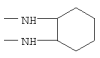

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS

L19 ANSWER 2 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
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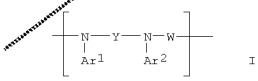
L19 ANSWER 3 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:433997 CAPLUS
DOCUMENT NUMBER: 146:422525
TITLE: Production of sulfo group-containing polymer and organic electroluminescent element therefrom
INVENTOR(S): Togashi, Kazuhiko; Naruse, Junko; Mita, Naruyoshi
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan
SOURCE: PCT Int. Appl., 64pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007043607 | A1 | 20070419 | WO 2006-JP320376 | 20061012 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-298775 A 20051013

GI

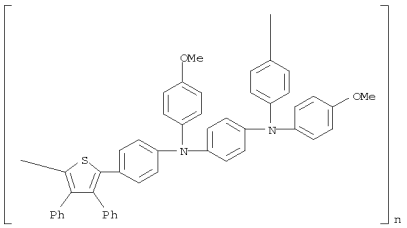


I

AB The polymer has a structure formed by introducing sulfo groups into a polymer comprising repeating units represented by the general formula I, wherein Ar1, Ar2 = monovalent aromatic group; Y = divalent group comprising an aromatic group; and W = C4-30 divalent aromatic group. Thus, 5.31 g N,N'-diphenyl-1,4-phenylenediamine and 11.15 g 2,5-bis(4-bromophenyl)-3,4-diphenylthiophene were reacted in the presence of 4.86 g sodium tert-butoxide and 92 mg tris(dibenzylideneacetone)dipalladium in o-xylene for 20 h at 135° to give 11.56 g polymer, 3.0 g of which was reacted with 30 mL 98% sulfuric acid for 17 h at room temperature to give 3.67 g title polymer after the workup.

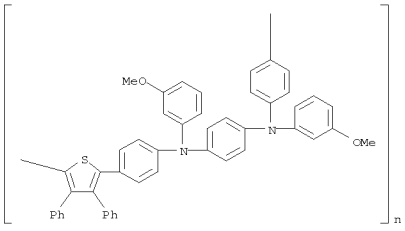
L19 ANSWER 3 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 934408-90-9DP, 2,5-Bis(4-bromophenyl)-3,4-diphenylthiophene-N,N'-di(4-methoxyphenyl)-1,4-phenylene diamine copoymer, sru, reaction product with sulfuric acid 934408-99-8DP, 2,5-Bis(4-bromophenyl)-3,4-diphenylthiophene-N,N'-di(3-methoxyphenyl)-1,4-phenylene diamine copoymer, sru, reaction product with sulfuric acid 934408-99-8P,

2,5-Bis(4-bromophenyl)-3,4-diphenylthiophene-N,N'-di(3-methoxyphenyl)-1,4-phenylene diamine copoymer, sru
RL: IMF (Industrial manufacture); PREP (Preparation)
(production of sulfo group-containing polymer and organic electroluminescent element therefrom)
RN 934408-90-9 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene[(4-methoxyphenyl)imino]-1,4-phenylene[(4-methoxyphenyl)imino]-1,4-phenylene] (CA INDEX NAME)

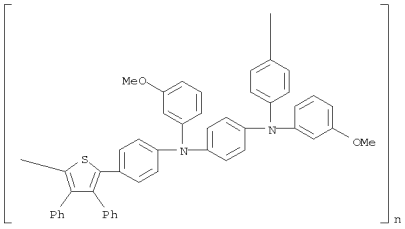


RN 934408-99-8 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene[(3-methoxyphenyl)imino]-1,4-phenylene[(3-methoxyphenyl)imino]-1,4-phenylene] (CA INDEX NAME)

L19 ANSWER 3 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

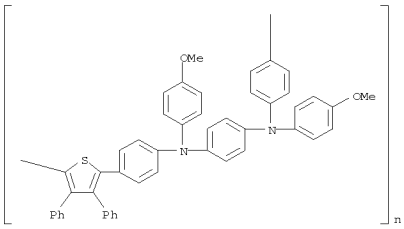


RN 934408-99-8 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene[(3-methoxyphenyl)imino]-1,4-phenylene[(3-methoxyphenyl)imino]-1,4-phenylene] (CA INDEX NAME)



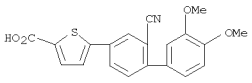
IT 934408-90-9P, 2,5-Bis(4-bromophenyl)-3,4-diphenylthiophene-N,N'-di(4-methoxyphenyl)-1,4-phenylene diamine copoymer, sru
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(production of sulfo group-containing polymer and organic electroluminescent element therefrom)
RN 934408-90-9 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene[(4-methoxyphenyl)imino]-1,4-phenylene[(4-methoxyphenyl)imino]-1,4-phenylene] (CA INDEX NAME)

L19 ANSWER 3 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

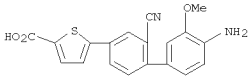


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 4 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
against xanthine oxidase.
IT 934469-57-5P 934469-73-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of phenylisonicotinic acid derivs. as xanthine
oxidase inhibitors)
RN 934469-57-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-(2-cyano-3',4'-dimethoxy[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)



RN 934469-73-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-(4'-amino-2-cyano-3'-methoxy[1,1'-biphenyl]-4-yl)- (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

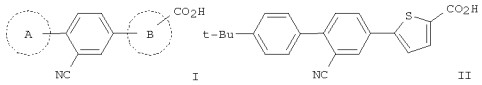
L19 ANSWER 4 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:433906 CAPLUS
DOCUMENT NUMBER: 146:441670
TITLE: Preparation of 2-phenylisonicotinic acid derivatives as xanthine oxidase inhibitors
INVENTOR(S): Sato, Junji; Hattori, Kazuyuki; Kubota, Hirokazu; Munakata, Ryosuke; Asano, Toru; Watanabe, Junko; Kawakami, Masakatsu; Kamikawa, Akira
PATENT ASSIGNEE(S): Astellas Pharma Inc., Japan
SOURCE: PCT Int. Appl., 56pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007043457 | A1 | 20070419 | WO 2006-JP320061 | 20061006 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-295740 A 20051007

OTHER SOURCE(S): MARPAT 146:441670
GI



I II

AB The title compds. 2-phenylisonicotinic acid derivs. I [wherein A = (un)substituted aryl or heteroaryl; B = (un)substituted heteroaryl] or salts thereof are prepared as xanthine oxidase inhibitors for the treatment
of hyperuricemia, gout, inflammatory bowel disease, diabetic nephropathy, diabetic retinitis, etc. For example, the compound II was prepared in a multi-step synthesis. II showed inhibitory activity with IC50 of 0.5 nM

L19 ANSWER 5 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:410784 CAPLUS
DOCUMENT NUMBER: 146:421829
TITLE: Preparation of phloroglucinol derivatives as ligands of selectins
INVENTOR(S): Aydt, Ewald; Kranich, Remo
PATENT ASSIGNEE(S): Revotar Biopharmaceuticals AG, Germany
SOURCE: PCT Int. Appl., 69pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007039112 | A1 | 20070412 | WO 2006-EP9153 | 20060920 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-205095 A 20050920

OTHER SOURCE(S): MARPAT 146:421829
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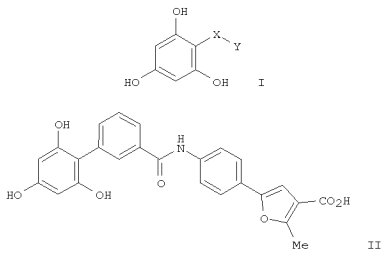


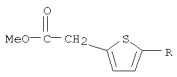
I II

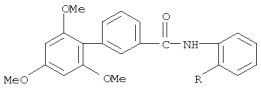
AB The title phloroglucinol derivs. I [wherein X = -(CH2)n-(NH)m-C(=O)-, -L-(NH)m-C(=O)-, or -L-(CH2)p-C(=T)-; Y = -(NH)m-(CH2)p-Z; L = (CH2)n or

L19 ANSWER 5 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(hetero)ring; m = 0 or 1; n = 1-3; p = 0-2; T = O, S, or 2H; Z = substituted (hetero)aryl], or pharmaceutically acceptable salts, esters, amides, or prodrugs thereof were prepd. as ligands to modulate the binding processes mediated by E-, P-, or L-selectins. For example, II was prepd. in a multi-step synthesis. II showed inhibitory activity against the binding of E-, P-, and L-selectins with IC50 data of 7.8, 5.2, and 6.1 μM, resp. The compds. are useful for treatment of chronic obstructive pulmonary disease, acute lung injury, chronic inflammatory diseases, autoimmune diseases, etc. (no data).

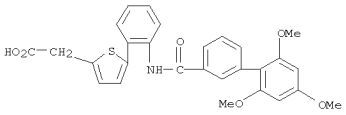
IT 934247-59-3P 934247-60-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of phloroglucinol derivs. as ligands of selectins)

RN 934247-59-3 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',4',6'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)



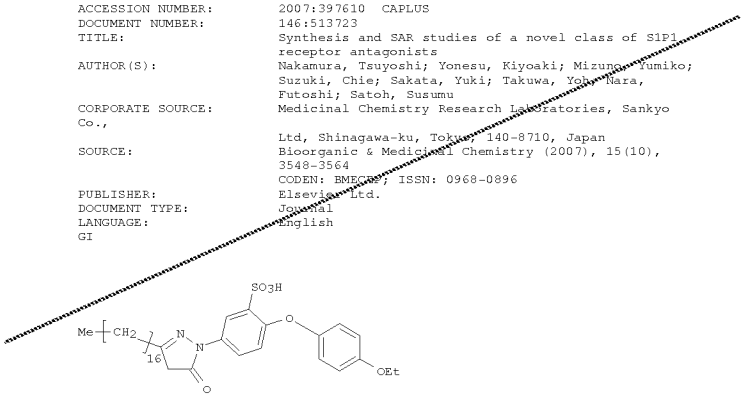


RN 934247-60-6 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',4',6'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 6 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:397610 CAPLUS
DOCUMENT NUMBER: 146:513723
TITLE: Synthesis and SAR studies of a novel class of S1P1 receptor antagonists
AUTHOR(S): Nakamura, Tsuyoshi; Yonesu, Kiyoaki; Mizuno, Yumiko; Suzuki, Chie; Sakata, Yuki; Takuwa, Yoh; Nara, Futoshi; Satoh, Suzumu
CORPORATE SOURCE: Medicinal Chemistry Research Laboratories, Sankyo Co., Ltd, Shinagawa-ku, Tokyo, 140-8710, Japan
SOURCE: Bioorganic & Medicinal Chemistry (2007), 15(10), 3548-3564
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

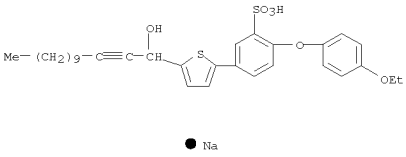


I

AB A series of Sodium 4-[(4-butoxyphenyl)thio]-2'-substituted-1,1'-biphenyl-3-sulfonates were identified as functional sphingosine-1-phosphate (S1P) antagonists with selectivity for the S1P1 receptor subtype starting from chemical lead 2 (I), which was found while screening our inhouse compound library. We performed chemical modifications on each regional structure of compound 2, for example, on the three ring compartments, the benzyl substituents, and the long alkyl chain part. The introduction of a biphenyl skeletal structure and the installation of a hydroxyl group onto the terminal carbon in the side-chain region resulted in the potent derivative 35c, which showed >500-fold more potent S1P1 inhibitory activity than lead compound 2. We report herein the synthesis and structure-activity relationships of structurally novel S1P1 receptor antagonists.

IT 936832-96-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(biphenylsulfonates as S1P1 receptor antagonists)

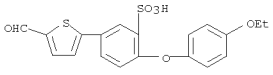
RN 936832-96-1 CAPLUS
CN Benzenesulfonic acid, 2-(4-ethoxyphenoxy)-5-[5-(1-hydroxy-2-tridecyn-1-yl)-2-thienyl]-, sodium salt (1:1) (CA INDEX NAME)





IT 936833-13-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(biphenylsulfonates as S1P1 receptor antagonists)

RN 936833-13-5 CAPLUS
CN Benzenesulfonic acid, 2-(4-ethoxyphenoxy)-5-(5-formyl-2-thienyl)- (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

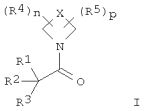
L19 ANSWER 7 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:384923 CAPLUS
DOCUMENT NUMBER: 146:401830
TITLE: Preparation of N-acylheterocycles as histone deacetylase (HDAC) inhibitors.
INVENTOR(S): Dobler, Marcus Rolf; Grob, Jonathan E.; Patnaik, Anup; Radetich, Branko; Shultz, Michael; Zhu, Yanyi
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 117pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007038459 | A2 | 20070405 | WO 2006-US37358 | 20060925 |
| WO 2007038459 | A3 | 20070712 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-720900P P 20050927
US 2005-754960P P 20051228

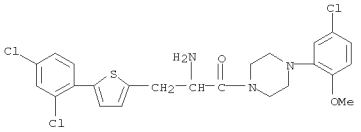
OTHER SOURCE(S): MARPAT 146:401830
GI



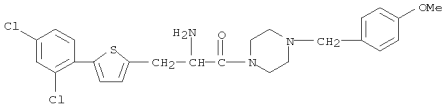
I

AB Title compds. [I; R1 = H, NH2, NHR6, SR6, SOR6, O, OR6; R2, R3 = H, (heterosubstituted) alkyl, alkenyl; X = atoms to form (heterosubstituted) cycloalkyl, cycloalkenyl, aryl, heterocycloalkyl, heteroaryl, polyheterocyclyl; n, p = 0-4; R4 = H, (heterosubstituted) alkyl,

L19 ANSWER 7 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
alkylaryl, alkoxy, cycloalkyl, aryl, heterocycloalkyl, heteroaryl, etc.; R5 = H, O, halo, alkoxy, (heterosubstituted) alkyl; R6 = H, alkyl], were prepd. Thus, title compd. (R)-2-amino-1-(4-biphenyl-3-yl-3,6-dihydro-2H-pyridin-1-yl)-3-(4-chlorophenyl)propan-1-one was prepd. from 1-Boc-4-piperidone, 3-biphenylboronic acid, and Boc-4-chloro-D-phenylalanine in 5 steps. I inhibited HDAC with IC50 = 0.005-100 μM.
IT 932717-01-6P 932717-38-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-acylheterocycles as histone deacetylase inhibitors)
RN 932717-01-6 CAPLUS
CN 1-Propanone, 2-amino-1-[4-(5-chloro-2-methoxyphenyl)-1-piperazinyl]-3-[5-(2,4-dichlorophenyl)-2-thienyl]- (CA INDEX NAME)



RN 932717-38-9 CAPLUS
CN 1-Propanone, 2-amino-3-[5-(2,4-dichlorophenyl)-2-thienyl]-1-[4-[(4-methoxyphenyl)methyl]-1-piperazinyl]- (CA INDEX NAME)



L19 ANSWER 8 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:332888 CAPLUS
DOCUMENT NUMBER: 146:358712
TITLE: Preparation of heterocyclic compounds containing biaryl moiety as LTA4H inhibitors
INVENTOR(S): Sandanayaka, Vincent; Singh, Jasbir; Gurney, Mark; Mamat, Bjorn; Yu, Peng; Bedel, Louis; Zhao, Lei
PATENT ASSIGNEE(S): Decode Chemistry, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 97pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2007066820 | A1 | 20070322 | US 2006-426287 | 20060623 |
| US 2007078263 | A1 | 20070405 | US 2006-426284 | 20060623 |
| WO 2007040681 | A1 | 20070412 | WO 2006-US24392 | 20060623 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

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|---|---|---|---|---|
| WO 2007040682 | A1 | 20070412 | WO 2006-US24393 | 20060623 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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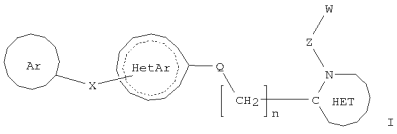
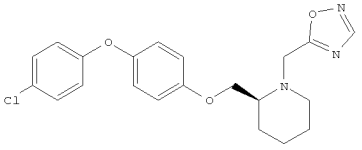
PRIORITY APPLN. INFO.: US 2005-719016P P 20050921

OTHER SOURCE(S): MARPAT 146:358712
GI

L19 ANSWER 8 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I

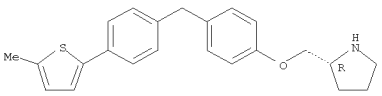


II

AB Title compds. I [Ar = aryl (optionally substituted with halo, alkyl, acyl, etc.), heteroaryl with (optionally substituted halo, alkyl, acyl, etc.); X = direct bond, O, SO, etc.; HetAr = aryl or heteroaryl ring attached via a ring carbon to Q, further characterized in that Q and X cannot be on adjacent positions in said aryl or heteroaryl ring; Q = -O-, -NR1-, S(O)p; R1 = H, alkyl; p = 0-2; n = 1-5; HET = saturated nitrogenous heterocycle (optionally substituted with halo, hydroxyl, amino, etc.); taken together ZW is H; or Z = (CH2)1-10, in which one or two (CH2) may optionally be replaced by -O-, -NR1-, -SO-, etc.; W = acyl, hydroxyl, carboxyl, etc.; with the provisos that (a) when Q is -O-, HET is (S)-pyrrolidine, rac-pyrrolidine or piperidine, Ar is Ph or halo-substituted Ph, and HetAr is p-phenylene, then the Z-W combination is other than H. (b) when Q is -NR1-, HET is thiazolidine, Ar is Ph or substituted Ph and HetAr is m-phenylene, then the Z-W combination is other than H. (c) when Q is -O-, HET is azetidine, Ar is Ph, n is 1 and HetAr is a 2,5-substituted pyridine, then the Z-W combination is other than H.] were prepared For example, recation of (S)-2-[4-(4-chlorophenoxy)-phenoxymethyl]-piperidine hydochloride, e.g., prepared from (S)-piperidine-1,2-dicarboxylic acid 1-tert-Bu ester in 5 steps, with 3-(chloromethyl)-1,2,4-oxadiazole followed by treatment with HCl afforded compound II·HCl. In leukotriene A4 hydrolase (LAT4H) inhibition assays, compound II·HCl exhibited the IC50 value of <5 μM. Compds. I are claimed useful for the treatment of inflammation, asthma, etc.
IT 929916-56-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

L19 ANSWER 8 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(prepn. of heterocyclic compds. contg. biaryl moiety as LTA4H inhibitors for treatment of inflammation, asthma, etc.)
RN 929916-56-3 CAPLUS
CN Pyrrolidine, 2-[[4-[[4-(5-methyl-2-thienyl)phenyl]methyl]phenoxy]methyl]-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

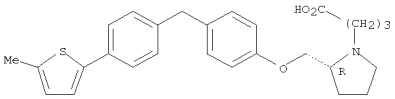
Absolute stereochemistry.



● HCl

IT 929916-61-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic compds. containing biaryl moiety as LTA4H inhibitors for treatment of inflammation, asthma, etc.)
RN 929916-61-0 CAPLUS
CN 1-Pyrrolidinebutanoic acid, 2-[[4-[[4-(5-methyl-2-thienyl)phenyl]methyl]phenoxy]methyl]-, hydrochloride (1:1), (2R)- (CA INDEX NAME)

Absolute stereochemistry.

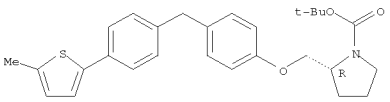


● HCl

IT 929918-23-0P 929918-28-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of heterocyclic compds. containing biaryl moiety as LTA4H inhibitors for treatment of inflammation, asthma, etc.)
RN 929918-23-0 CAPLUS

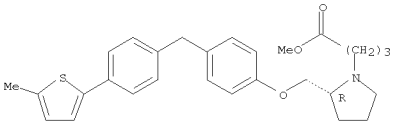
L19 ANSWER 8 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1-Pyrrolidinecarboxylic acid, 2-[[4-[[4-(5-methyl-2-thienyl)phenyl]methyl]phenoxy]methyl]-, 1,1-dimethylethyl ester, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 929918-28-5 CAPLUS
CN 1-Pyrrolidinebutanoic acid, 2-[[4-[[4-(5-methyl-2-thienyl)phenyl]methyl]phenoxy]methyl]-, methyl ester, (2R)- (CA INDEX NAME)

Absolute stereochemistry.



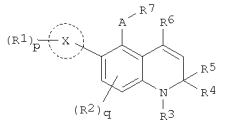
L19 ANSWER 9 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:328279 CAPLUS
DOCUMENT NUMBER: 146:337748
TITLE: Preparation of novel 1,2-dihydroquinoline derivatives having glucocorticoid receptor binding activity
INVENTOR(S): Matsuda, Mamoru; Mori, Toshiyuki; Kawashima, Kenji; Nagatsuka, Masato; Kobayashi, Sachiko; Yamamoto, Minoru; Kato, Masatomo; Takai, Miwa; Oda, Tomoko
PATENT ASSIGNEE(S): Santen Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 272pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007032556 | A1 | 20070322 | WO 2006-JP318674 | 20060914 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-266622 A 20050914
JP 2006-27128 A 20060203

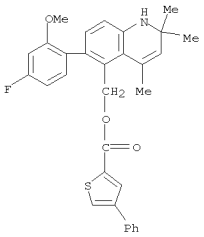
OTHER SOURCE(S): MARPAT 146:337748
GI



I

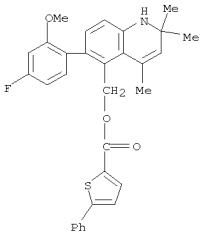
AB The title compds. [I; ring X = benzene or a pyridine ring; R1 = halo, hydroxy-lower alkyl, lower alkoxy, each (un)substituted lower alkyl, or lower alkenyloxy, HO, , NH2, NO2, cyano; p = an integer of 0-5; R2 = halo, HO or its ester, each (un)substituted lower alkyl or lower alkoxy; q = an integer of 0-2; R3 = H, each (un)substituted lower alkyl group, lower

L19 ANSWER 9 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
alkenyl, lower alkynyl, aryl, lower alkylcarbonyl, lower alkenylcarbonyl, lower alkynylcarbonyl, or arylcarbonyl; R4, R5, R6 = H, lower alkyl; or R4 and R5 together form 3- to 8-membered lower cycloalkane ring; A = lower alkylene or CO; R7 = OR8, NR8R9, SR8, S(O)R8, S(O)2R8; R8 = formyl, CO2H, CONH2, each (un)substituted lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, or heterocyclyl, etc.; R9 = H, formyl, CO2H, CONH2, each (un)substituted lower alkyl, lower alkenyl, lower alkynyl, lower cycloalkyl, aryl, or heterocyclyl, etc.] or salts thereof are prepd.
These compds. are glucocorticoid receptor modulators and effective for treating diseases assocd. with a glucocorticoid receptor including (1) metabolic disorders such as diabetes and obesity, (2) inflammatory diseases such as enteritis and chronic obstructive pulmonary diseases, (3) autoimmune diseases such as collagen disease, (4) allergic diseases such as asthma, atopic dermatitis, and allergic rhinitis, (5) central nervous system diseases such as mental disorders, Altzheimer's disease, and drug abuse, (6) cardiovascular diseases such as hypertension, hypercalcemia, hyperinsulinemia, and hyperlipidemia, (7) homeostasis-related diseases causing abnormality in immunity and internal secretion, and (8) glaucoma. Thus, 52 mg 5-chloromethyl-6-(2-methoxyphenyl)-2,2,4-trimethyl-1,2-dihydroquinoline, 42 μL phenol, and 88 mg K2CO3 were suspended in 2 mL DMF , stirred at 80° for 5 h to give, after workup and silica gel chromatog., 6-(2-methoxyphenyl)-5-phenoxymethyl-2,2,4-trimethyl-1,2-dihydroquinoline (II). II showed 100% binding to glucocorticoid receptor in a receptor competitive binding assay by polarized fluorometry.
IT 929528-07-4P 929528-09-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel 1,2-dihydroquinoline derivs. having glucocorticoid receptor binding activity)
RN 929528-07-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-phenyl-, [6-(4-fluoro-2-methoxyphenyl)-1,2-dihydro-2,2,4-trimethyl-5-quinolinyl]methyl ester (CA INDEX NAME)



RN 929528-09-6 CAPLUS

L19 ANSWER 9 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 2-Thiophenecarboxylic acid, 5-phenyl-, [6-(4-fluoro-2-methoxyphenyl)-1,2-dihydro-2,2,4-trimethyl-5-quinolinyl]methyl ester (CA INDEX NAME)



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 10 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:322891 CAPLUS
DOCUMENT NUMBER: 146:323557
TITLE: Novel aromatic compounds comprising trimethoxyphenyl subunits and their use as selectin antagonists
INVENTOR(S): Aydt, Ewald M.; Kranich, Remo; Busemann, Anke S.
PATENT ASSIGNEE(S): Revotar Biopharmaceuticals AG, Germany
SOURCE: Eur. Pat. Appl., 46pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1764093 | A1 | 20070321 | EP 2005-20510 | 20050920 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |
| WO 2007039113 | A1 | 20070412 | WO 2006-EP9154 | 20060920 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |

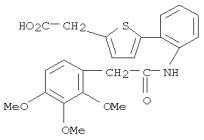
PRIORITY APPLN. INFO.: EP 2005-20510 A 20050920

OTHER SOURCE(S): MARPAT 146:323557

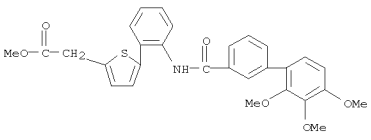
AB Pharmaceutical compns. comprising at least one aromatic compound containing a trimethoxyphenyl subunit, the pharmaceutically acceptable salts, esters or amides and prodrugs thereof and a pharmaceutically acceptable carrier, useful in a medicine are described. The compds. are applied to modulate the in vitro and in vivo binding processes mediated by E-, P- or L-selectin for the treatment, diagnosis or prophylaxis of inflammatory disorders and other conditions where selectin-mediated processes play a role. Thus, compds. of the present invention were prepared and assayed for their ability to inhibit the binding of P-, L-, or E-selectin chimeric mols. to sLex and tyrosine sulfate residues linked to a polymeric matrix as a PSGL-1 substitute.

IT 864518-32-1P 928846-99-5P 928847-12-5P 928847-14-7P 928847-16-9P 928847-17-0P
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

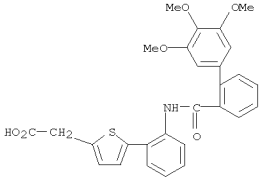
L19 ANSWER 10 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(arom. compds. comprising trimethoxyphenyl subunits as selectin antagonists for treatment, diagnosis or prophylaxis of inflammatory disorders)
RN 864518-32-1 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phenyl]- (CA INDEX NAME)



RN 928846-99-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

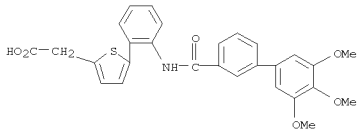


RN 928847-12-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-2-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

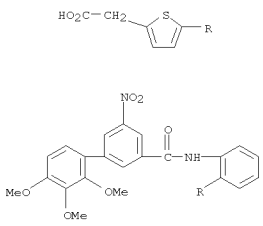


RN 928847-14-7 CAPLUS

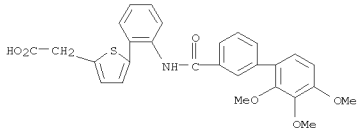
L19 ANSWER 10 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)



RN 928847-16-9 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy-5-nitro[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

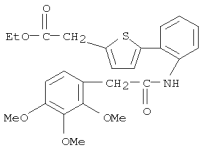


RN 928847-17-0 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

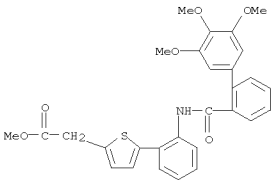


IT 864518-31-0P 928847-11-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(aromatic compds. comprising trimethoxyphenyl subunits as selectin

L19 ANSWER 10 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
antagonists for treatment, diagnosis or prophylaxis of inflammatory disorders)
RN 864518-31-0 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phenyl]-, ethyl ester (CA INDEX NAME)



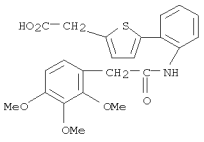
RN 928847-11-4 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-2-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)



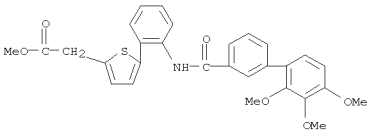
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:172184 CAPLUS
DOCUMENT NUMBER: 146:421689
TITLE: Rational Design of Novel, Potent Small Molecule Pan-Selectin Antagonists
AUTHOR(S): Kranich, Remo; Busemann, Anke S.; Bock, Daniel; Schroeter-Maas, Sabine; Beyer, Diana; Heinemann, Bo; Meyer, Michael; Schierhorn, Katrin; Zahlten, Rainer; Wolff, Gerhard; Aydt, Ewald M.
CORPORATE SOURCE: Revotar Biopharmaceuticals AG, Hennigsdorf, 16761, Germany
SOURCE: Journal of Medicinal Chemistry (2007), 50(6), 1101-1111
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 146:421689
AB The first results of a rational hit-finding strategy to design novel small mol. antiinflammatory drugs targeting selectins, a family of three cellular adhesion mols., are described. Based on recent progress in understanding of mol. interaction between selectins and their natural ligands as well as progress in clin. development of synthetic antagonists, such as bimosiamose (TBC1269), this study was initiated to discover small mol. selectin antagonists with improved pharmacol. properties. Considering bimosiamose as template structure, a ligand-based approach followed by focused chemical synthesis has been applied to yield novel synthetic small mols. (MWr < 500) with a trihydroxybenzene motif, bearing neither peptidic nor glycosidic components, with nanomolar in vitro activity. Biol. evaluation involves two kinds of in vitro assays, a static mol. binding assay, and a dynamic HL-60 cell attachment assay. As compared to controls, the novel compds. showed improved biol. in vitro activity both under static and dynamic conditions.
IT 864518-32-1P 928846-99-5P 928847-11-4P 928847-12-5P 928847-14-7P 928847-17-0P 934176-26-8P 934176-27-9P 934176-29-1P 934176-31-5P 934176-43-9P 934176-44-0P 934176-45-1P 934176-48-4P 934176-50-8P 934176-51-9P 934176-52-0P 934176-53-1P 934176-56-4P 934176-57-5P 934176-59-7P 934176-63-3P 934176-64-4P 934176-68-8P 934176-71-3P 934176-72-4P 934176-76-8P 934176-77-9P 934176-81-5P 934176-82-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of small mols. with a trihydroxybenzene motif as pan-selectin antagonists and potential antiinflammatory agents)
RN 864518-32-1 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phenyl]- (CA INDEX NAME)

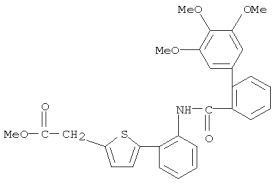
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 928846-99-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

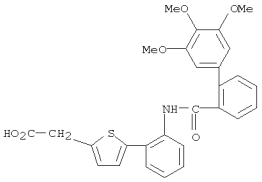


RN 928847-11-4 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-2-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

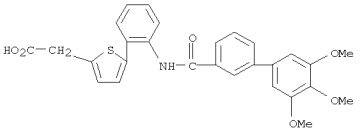


RN 928847-12-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-2-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

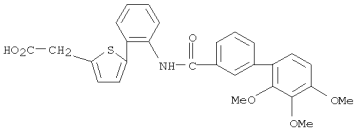
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 928847-14-7 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

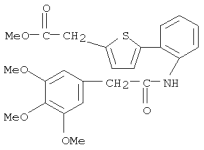


RN 928847-17-0 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

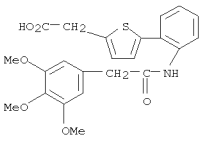


RN 934176-26-8 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(3,4,5-trimethoxyphenyl)acetyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

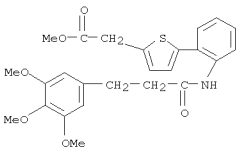
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 934176-27-9 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(3,4,5-trimethoxyphenyl)acetyl]amino]phenyl]- (CA INDEX NAME)

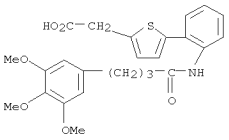


RN 934176-29-1 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-3-(3,4,5-trimethoxyphenyl)propyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

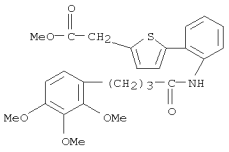


RN 934176-31-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-3-(3,4,5-trimethoxyphenyl)propyl]amino]phenyl]- (CA INDEX NAME)

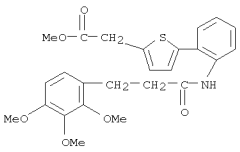
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 934176-48-4 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-4-(2,3,4-trimethoxyphenyl)butyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

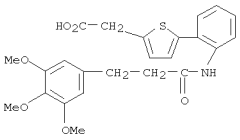


RN 934176-50-8 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-3-(2,3,4-trimethoxyphenyl)propyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

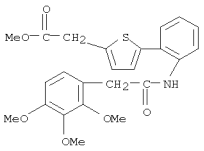


RN 934176-51-9 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-3-(2,3,4-trimethoxyphenyl)propyl]amino]phenyl]- (CA INDEX NAME)

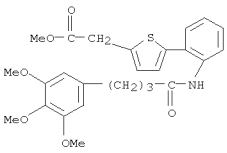
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 934176-43-9 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

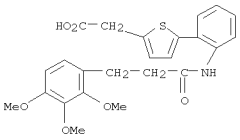


RN 934176-44-0 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-4-(3,4,5-trimethoxyphenyl)butyl]amino]phenyl]-, methyl ester (CA INDEX NAME)



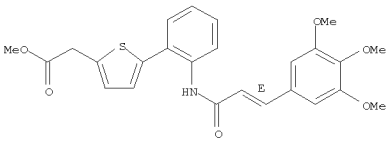
RN 934176-45-1 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[1-oxo-4-(3,4,5-trimethoxyphenyl)butyl]amino]phenyl]- (CA INDEX NAME)

L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



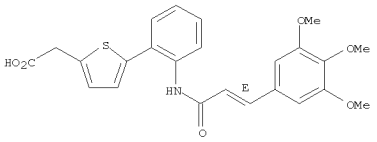
RN 934176-52-0 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2E)-1-oxo-3-(3,4,5-trimethoxyphenyl)-2-propen-1-yl]amino]phenyl]-, methyl ester (CA INDEX NAME)

Double bond geometry as shown.



RN 934176-53-1 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2E)-1-oxo-3-(3,4,5-trimethoxyphenyl)-2-propen-1-yl]amino]phenyl]- (CA INDEX NAME)

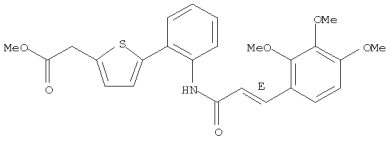
Double bond geometry as shown.



RN 934176-56-4 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2E)-1-oxo-3-(2,3,4-trimethoxyphenyl)-2-propen-1-yl]amino]phenyl]-, methyl ester (CA INDEX NAME)

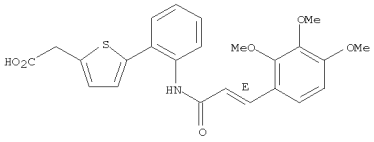
Double bond geometry as shown.

L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

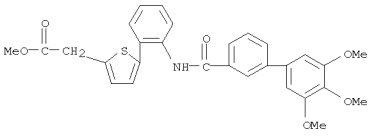


RN 934176-57-5 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2E)-1-oxo-3-(2,3,4-trimethoxyphenyl)-2-propen-1-yl]amino]phenyl]- (CA INDEX NAME)

Double bond geometry as shown.

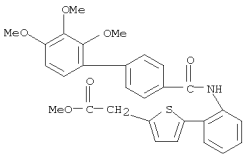


RN 934176-59-7 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(3',4',5'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

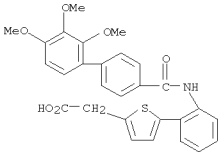


RN 934176-63-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

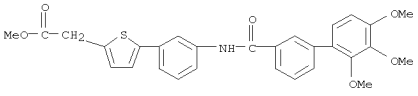
L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



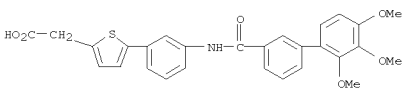
RN 934176-72-4 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-4-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)



RN 934176-76-8 CAPLUS
CN 2-Thiopheneacetic acid, 5-[3-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

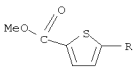


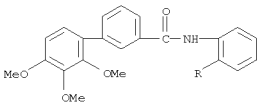
RN 934176-77-9 CAPLUS
CN 2-Thiopheneacetic acid, 5-[3-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)



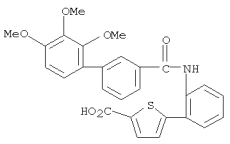
RN 934176-81-5 CAPLUS

L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

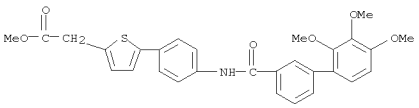




RN 934176-64-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]- (CA INDEX NAME)

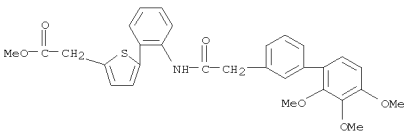


RN 934176-68-8 CAPLUS
CN 2-Thiopheneacetic acid, 5-[4-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

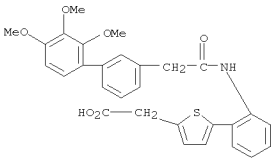


RN 934176-71-3 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[(2',3',4'-trimethoxy[1,1'-biphenyl]-4-yl)carbonyl]amino]phenyl]-, methyl ester (CA INDEX NAME)

L19 ANSWER 11 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)acetyl]amino]phenyl]-, methyl ester (CA INDEX NAME)



RN 934176-82-6 CAPLUS
CN 2-Thiopheneacetic acid, 5-[2-[[2-(2',3',4'-trimethoxy[1,1'-biphenyl]-3-yl)acetyl]amino]phenyl]- (CA INDEX NAME)



REFERENCE COUNT: 83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:151696 CAPLUS
DOCUMENT NUMBER: 146:402580
TITLE: Probing the periphery of dendrimers by heterogeneous electron transfer
AUTHOR(S): Krishnamoorthy, K.; Dasari, Raghunath Reddy; Nantalaksakul, Arpornrat; Thayumanavan, S.
CORPORATE SOURCE: Department of Chemistry, University of Massachusetts, Amherst, MA, 01003, USA
SOURCE: Chemical Communications (Cambridge, United Kingdom) (2007), (7), 739-741
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

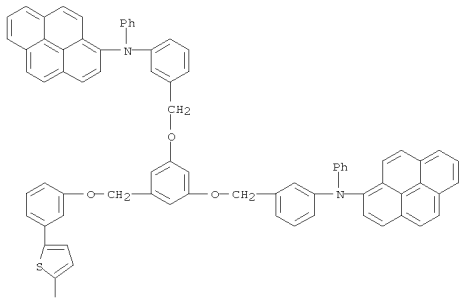
AB The accessibility of the electroactive periphery was studied and compared for dendrimers and linear analogs by heterogeneous electron transfer using microelectrodes. The authors have shown that the electroactive units substituted at the periphery can be encapsulated significantly enough at higher generations to exhibit differences in electron transfer rates and radical ion stabilities. The authors also show that attempts to discern this information using the more classical, fully decorated dendrimers such as G(1)F-G(3)F could be deceiving. This study is likely to have implications not only in areas such as electrochem. sensing using dendrimers, but also in interpreting the polyvalent effects in biomol. recognition using dendrimer scaffolds. The results here show that the ligands at the periphery are not likely to be equally available for binding of dendrimers at higher generations.

IT 840531-18-2
RL: PRP (Properties)
(heterogeneous electron transfer in diarylaminopyrene peripheral units of polyether dendrimers)

RN 840531-18-2 CAPLUS
CN 1-Pyrenamine, N,N',N'',N'''-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene-5,1,3-benzenetriylbis(oxymethylene-3,1-phenylene)]]tetrakis[N-phenyl- (CA INDEX NAME)

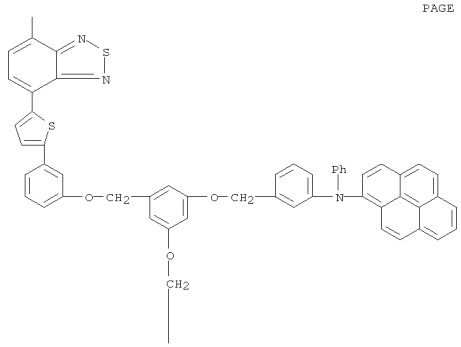
L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

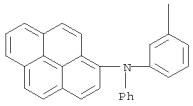


L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



PAGE 3-A

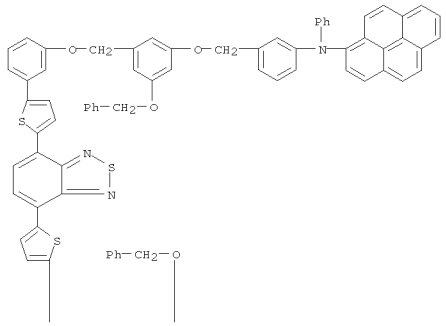


IT 903562-03-8P 903562-04-9P 903562-05-0P
903562-06-1P 903562-07-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(heterogeneous electron transfer in diarylaminopyrene peripheral units of polyether dendrimers)

RN 903562-03-8 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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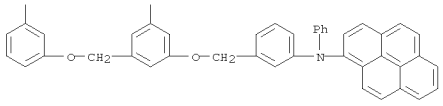
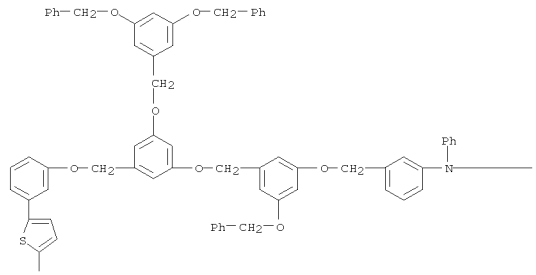


RN 903562-04-9 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-[[3,5-bis(phenylmethoxy)phenyl]methoxy]-3,1-phenylene]oxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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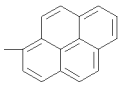
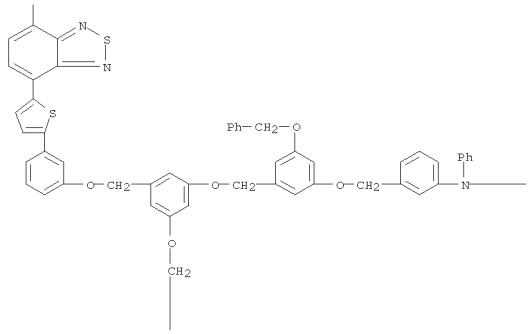


L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



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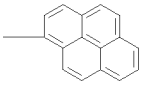
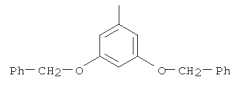


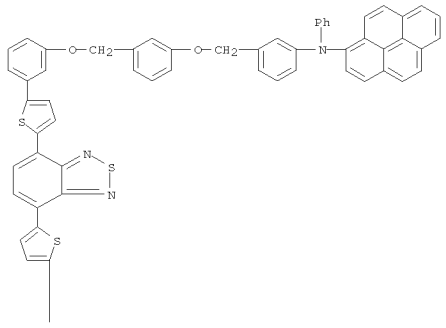
L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-A



RN 903562-05-0 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

PAGE 1-A



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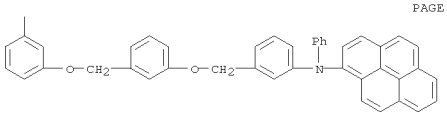
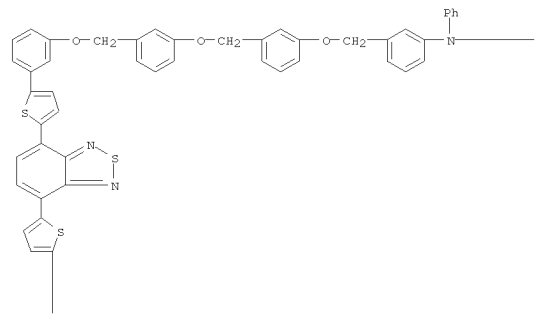


RN 903562-06-1 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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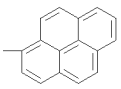

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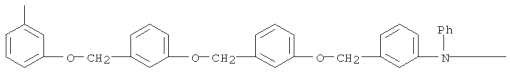
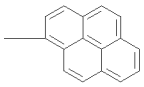


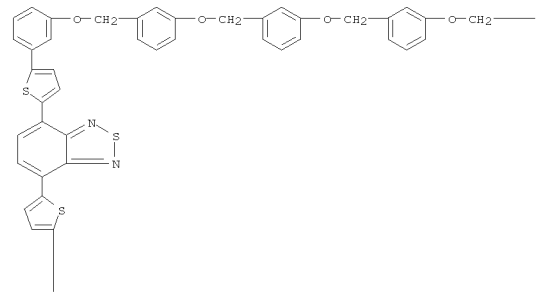
L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B



RN 903562-07-2 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

PAGE 1-A



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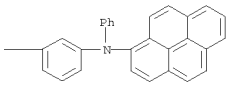
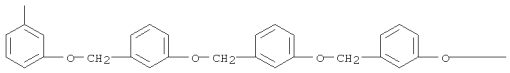


L19 ANSWER 12 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



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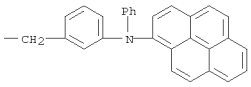

REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 13 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:17778 CAPLUS
DOCUMENT NUMBER: 146:121969
TITLE: Preparation of amino-5-(5-membered)hetero-arylimidazolone compounds as β-secretase modulators for treating diseases involving β-amyloid deposits and neurofibrillary tangles
INVENTOR(S): Malamas, Michael Sotirios; Zhou, Ping; Fobare, William Floyd; Solvibile, William Ronald; Gunawan, Iwan Suwandi; Erdei, James Joseph; Yan, Yinfa; Andrae, Patrick Michael; Quagliato, Dominick Anthony
PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
SOURCE: U.S. Pat. Appl. Publ., 91pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2007004786 | A1 | 20070104 | US 2006-478122 | 20060629 |
| WO 2007005366 | A1 | 20070111 | WO 2006-US24793 | 20060626 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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PRIORITY APPLN. INFO.: US 2005-695353P P 20050630

OTHER SOURCE(S): MARPAT 146:121969
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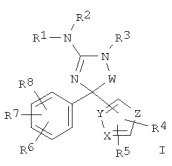

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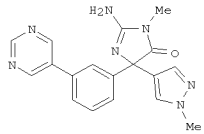


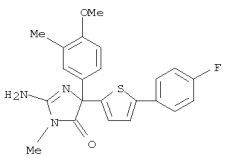
II

L19 ANSWER 13 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The present invention provides a 2-amino-5-heteroaryl-5-phenylimidazolone compound of formula I (wherein W = CO, CS or CH2; X = N, NO, S, etc. ; Y = N, NO, S, O , etc.; Z = C, N, NO, S, etc.; R1 and R2 = H, (un)substituted C1-C4alkyl etc.; R3 = H, (un)substituted C1-C6alkyl, etc.; R4, R5, R6, R7 and R8= H, halo, NO2, CN, etc.). The present invention also provides methods for the use thereof to inhibit β-secretase (BACE) and treat β-amyloid deposits and neurofibrillary tangles. Preparation of I is exemplified. For example, II was prepared in 7 steps by reactions involving 4-iodopyrazole, 3-bromophenylacetylene, 1-methylguanidine, and 5-pyrimidine boronic acid. In an in vitro assay involving human BACE1, II had an IC50 of 0.11-1.00 μM.

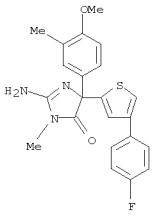
IT 918484-11-4P, 2-Amino-5-[5-(4-fluorophenyl)thien-2-yl]-5-(4-methoxy-3-methylphenyl)-3-methyl-3,5-dihydro-4H-imidazol-4-one 918484-13-6P, 2-Amino-5-[4-(4-fluorophenyl)thien-2-yl]-5-(4-methoxy-3-methylphenyl)-3-methyl-3,5-dihydro-4H-imidazol-4-one
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of amino hetero-arylimidazolone compds. as β-secretase modulators for treating diseases involving β-amyloid deposits and neurofibrillary tangles)

RN 918484-11-4 CAPLUS
CN 4H-Imidazol-4-one, 2-amino-5-[5-(4-fluorophenyl)-2-thienyl]-3,5-dihydro-5-(4-methoxy-3-methylphenyl)-3-methyl- (CA INDEX NAME)



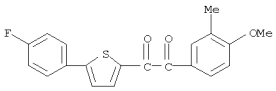
RN 918484-13-6 CAPLUS
CN 4H-Imidazol-4-one, 2-amino-5-[4-(4-fluorophenyl)-2-thienyl]-3,5-dihydro-5-(4-methoxy-3-methylphenyl)-3-methyl- (CA INDEX NAME)

L19 ANSWER 13 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



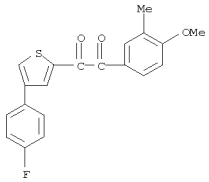
IT 918487-44-2P, 1-[5-(4-Fluorophenyl)thien-2-yl]-2-(4-methoxy-3-methylphenyl)ethane-1,2-dione 918487-48-6P, 1-[4-(4-Fluorophenyl)thien-2-yl]-2-(4-methoxy-3-methylphenyl)ethane-1,2-dione
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amino hetero-arylimidazolone compds. as β-secretase modulators for treating diseases involving β-amyloid deposits and neurofibrillary tangles)

RN 918487-44-2 CAPLUS
CN 1,2-Ethanedione, 1-[5-(4-fluorophenyl)-2-thienyl]-2-(4-methoxy-3-methylphenyl)- (CA INDEX NAME)



RN 918487-48-6 CAPLUS
CN 1,2-Ethanedione, 1-[4-(4-fluorophenyl)-2-thienyl]-2-(4-methoxy-3-methylphenyl)- (CA INDEX NAME)

L19 ANSWER 13 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 14 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2007:14431 CAPLUS
DOCUMENT NUMBER: 146:121962
TITLE: Pyrazole based LXR modulators and their preparation, pharmaceutical compositions and use in the treatment of diseases
INVENTOR(S): Busch, Breet B.; Flatt, Brenton T.; Gu, Xiao Hui; Martin, Richard; Mohan, Raju; Nyman, Michael Charles; Schweiger, Edwin; Stevens, William C., Jr.; Wang, Tie Lin; Xie, Yinong
PATENT ASSIGNEE(S): Exelixis, Inc., USA
SOURCE: PCT Int. Appl., 533pp., which
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2007002559 | A1 | 20070104 | WO 2006-US24749 | 20060626 |
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| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| PRIORITY APPLN. INFO.: | | | US 2005-694372P | P 20050627 |
| | | | US 2005-736120P | P 20051110 |

OTHER SOURCE(S): MARPAT 146:121962
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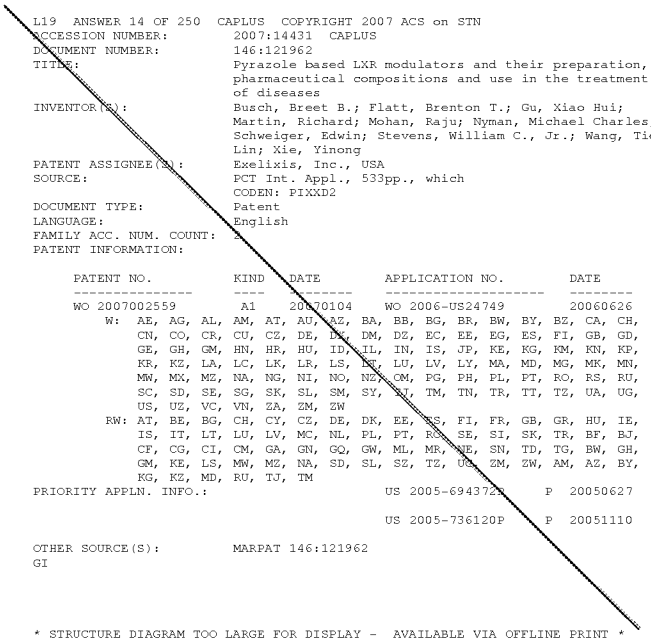


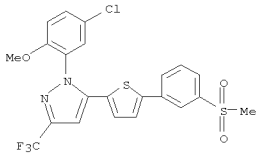
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Compds. of the invention, such as compds. of formulas I, II, III, and IV and pharmaceutically acceptable salts, isomers, and prodrugs thereof, which are useful as modulators of the activity of liver X receptors. Pharmaceutical compns. containing the compds. and methods of using the compds.
are also disclosed. Compds. of formulas I - IV wherein R1 is (un)substituted (hetero)aryl, (un)substituted alkyl, (un)substituted alkenyl, (un)substituted (thio)ethers, etc.; R2 and R21 are independently (un)substituted alkyl, (un)substituted alkenyl, (un)substituted alkyldiyl,
H, halo, NO2, CN, (hetero)aryl, etc.; R3 is(un)substituted alkyl, (un)substituted alkyldiyl, (un)substituted alkenyl, (un)substituted acetyl, (un)substituted thioacetyl, etc.; G is (un)substituted (hetero)aryl, (un)substituted biaryl, (un)substituted alkenoyl, etc.; and

L19 ANSWER 14 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
their pharmaceutically acceptable salts, isomers, and prodrugs thereof, are claimed. Example compd. V was prepd. by acylation of 2-acetyl-5-bromothiophene with Et trifluoroacetate; the resulting 1-(5-bromothien-2-yl)-4,4,4-trifluorobutane-1,3-dione underwent cyclization with 2,5-dichlorophenylhydrazine hydrochloride to give 5-(5-bromothien-2-yl)-1-(2,5-dichlorophenyl)-3-trifluoromethyl-1H-pyrazole, which underwent Suzuki cross-coupling with 3-aminosulfonylphenylboronic acid to give compd. II. All the invention compds. were evaluated for their LXR modulatory activity. From the assay,
it was detd. that several of the tested compds. exhibited IC50 values of <
1 μM.

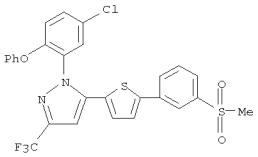
IT 918315-43-2P 918315-45-4P 918315-51-2P 918315-64-7P 918317-96-1P 918317-97-2P 918319-99-0P 918321-56-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of pyrazoles as LXR modulators and their use in
the treatment of diseases)

RN 918315-43-2 CAPLUS
CN 1H-Pyrazole, 1-(5-chloro-2-methoxyphenyl)-5-[5-[3-(methylsulfonyl)phenyl]-2-thienyl]-3-(trifluoromethyl)- (CA INDEX NAME)

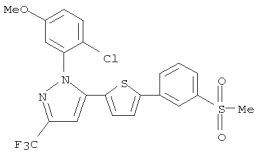


RN 918315-45-4 CAPLUS
CN 1H-Pyrazole, 1-(5-chloro-2-phenoxyphenyl)-5-[5-[3-(methylsulfonyl)phenyl]-2-thienyl]-3-(trifluoromethyl)- (CA INDEX NAME)

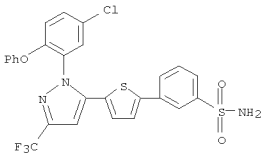
L19 ANSWER 14 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 918315-51-2 CAPLUS
CN 1H-Pyrazole,
1-(2-chloro-5-methoxyphenyl)-5-[5-[3-(methylsulfonyl)phenyl]-
2-thienyl]-3-(trifluoromethyl)- (CA INDEX NAME)

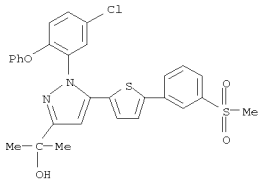


RN 918315-64-7 CAPLUS
CN Benzenesulfonamide,
3-[5-[1-(5-chloro-2-phenoxyphenyl)-3-(trifluoromethyl)-
1H-pyrazol-5-yl]-2-thienyl]- (CA INDEX NAME)

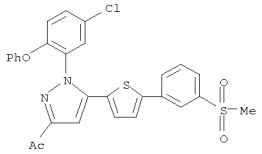


RN 918317-96-1 CAPLUS
CN 1H-Pyrazole-3-methanol, 1-(5-chloro-2-phenoxyphenyl)-α,α-

L19 ANSWER 14 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
dimethyl-5-[5-[3-(methylsulfonyl)phenyl]-2-thienyl]- (CA INDEX NAME)



RN 918317-97-2 CAPLUS
CN Ethanone,
1-[1-(5-chloro-2-phenoxyphenyl)-5-[5-[3-(methylsulfonyl)phenyl]-
2-thienyl]-1H-pyrazol-3-yl]- (CA INDEX NAME)

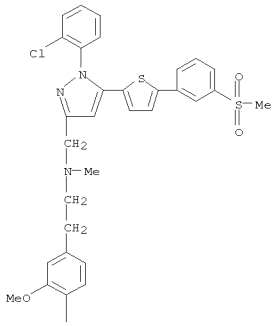


RN 918319-99-0 CAPLUS
CN 1H-Pyrazole-3-methanamine, 1-(2-chlorophenyl)-N-[2-(3,4-

dimethoxyphenyl)ethyl]-N-methyl-5-[5-[3-(methylsulfonyl)phenyl]-2-thienyl]-
(CA INDEX NAME)

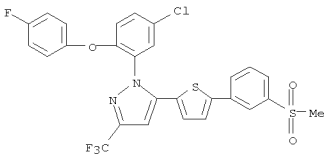
L19 ANSWER 14 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

RN 918321-56-9 CAPLUS
CN 1H-Pyrazole, 1-[5-chloro-2-(4-fluorophenoxy)phenyl]-5-[5-[3-
(methylsulfonyl)phenyl]-2-thienyl]-3-(trifluoromethyl)- (CA INDEX NAME)



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

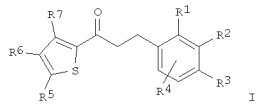
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1357306 CAPLUS
DOCUMENT NUMBER: 146:100548
TITLE: Preparation of thiophene derivatives as S1P1/EDG1 receptor agonists
INVENTOR(S): Bolli, Martin; Lehmann, David; Mathys, Boris; Mueller, Claus; Velker, Joerg
PATENT ASSIGNEE(S): Actelion Pharmaceuticals Ltd, Switz.
SOURCE: PCT Int. Appl., 58pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006137019 | A1 | 20061228 | WO 2006-IB51990 | 20060620 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: WO 2005-EP6840 A 20050624

OTHER SOURCE(S): MARPAT 146:100548
GI



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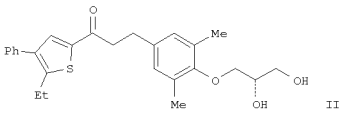
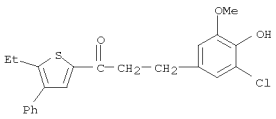


II

AB Thiophene derivs., I, wherein R1 and R2 are H, alkyl, alkoxy or halo groups; R3 is H, alkyl, (un)substituted ester, (un)substituted acid, (un)substituted amides, etc.; R4 is H, alkyl or halogen; R5 is trifluoromethyl, Me, Et or propyl; R6 is (un)substituted Me, Et, halo, methoxy; R7 is H or Me are their preparation as S1P1/EDG1 receptor agonists.
Thus, II was prepared and tested in a GTPγS binding assay (EC50 was 6.7 nM) and had an in vivo efficacy of -48.5% 3 h after oral administration of 10 mg/kg of compound to normotensive male Wistar rats.

IT 917873-40-6P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of thiophene derivs. as S1P1/EDG1 receptor agonists)

RN 917873-40-6 CAPLUS
CN 1-Propanone, 3-(3-chloro-4-hydroxy-5-methoxyphenyl)-1-(5-ethyl-4-phenyl-2-thienyl)- (CA INDEX NAME)



IT 917873-21-3P 917873-22-4P 917873-24-6P
917873-26-8P 917873-27-9P 917873-28-0P
917873-31-5P 917873-36-0P 917873-37-1P
917873-39-3P 917873-42-8P 917873-44-0P
917873-51-9P 917873-56-4P 917873-60-0P
917873-63-3P 917873-65-5P 917873-66-6P
917873-68-8P 917873-70-2P 917873-79-1P
917873-81-5P 917873-83-7P 917873-85-9P
917873-89-3P 917873-90-6P 917873-91-7P
917873-93-9P 917873-94-0P 917873-95-1P
917873-96-2P 917873-98-4P 917873-99-5P
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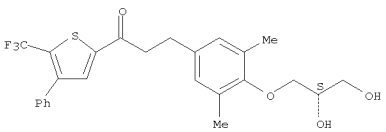
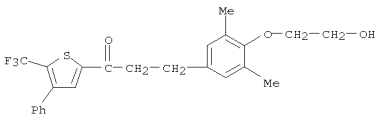
917874-05-6P 917874-06-7P 917874-07-8P
917874-09-0P 917874-10-3P 917874-11-4P
917874-12-5P 917874-13-6P 917874-14-7P
917874-16-9P 917874-17-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of thiophene derivs. as S1P1/EDG1 receptor agonists)

RN 917873-21-3 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[4-phenyl-5-(trifluoromethyl)-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.

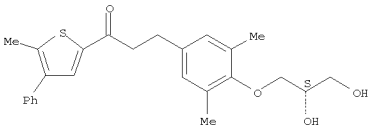


RN 917873-22-4 CAPLUS
CN 1-Propanone, 3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]-1-[4-phenyl-5-(trifluoromethyl)-2-thienyl]- (CA INDEX NAME)

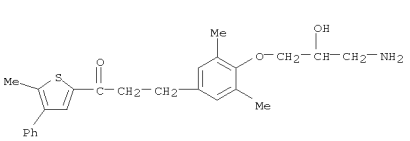


RN 917873-24-6 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-(5-methyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

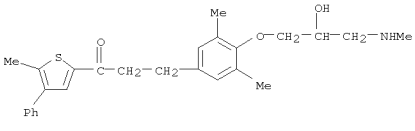
Absolute stereochemistry.



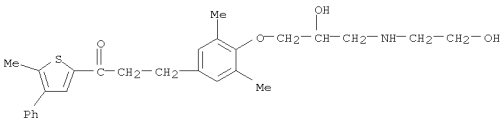
RN 917873-26-8 CAPLUS
CN 1-Propanone, 3-[4-(3-amino-2-hydroxypropoxy)-3,5-dimethylphenyl]-1-(5-methyl-4-phenyl-2-thienyl)- (CA INDEX NAME)



RN 917873-27-9 CAPLUS
CN 1-Propanone, 3-[4-[2-hydroxy-3-(methylamino)propoxy]-3,5-dimethylphenyl]-1-(5-methyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

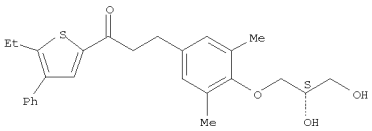


RN 917873-28-0 CAPLUS
CN 1-Propanone, 3-[4-[2-hydroxy-3-[(2-hydroxyethyl)amino]propoxy]-3,5-dimethylphenyl]-1-(5-methyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

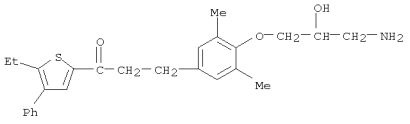


L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 917873-31-5 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-(5-ethyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

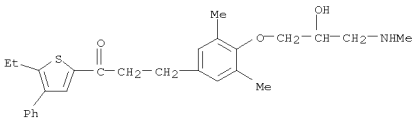
Absolute stereochemistry.



RN 917873-36-0 CAPLUS
CN 1-Propanone, 3-[4-(3-amino-2-hydroxypropoxy)-3,5-dimethylphenyl]-1-(5-ethyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

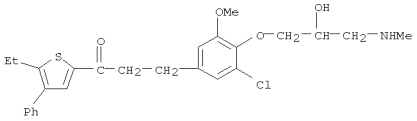


RN 917873-37-1 CAPLUS
CN 1-Propanone, 1-(5-ethyl-4-phenyl-2-thienyl)-3-[4-[2-hydroxy-3-(methylamino)propoxy]-3,5-dimethylphenyl]- (CA INDEX NAME)



RN 917873-39-3 CAPLUS
CN 1-Propanone, 1-(5-ethyl-4-phenyl-2-thienyl)-3-[4-[2-hydroxy-3-[(2-hydroxyethyl)amino]propoxy]-3,5-dimethylphenyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



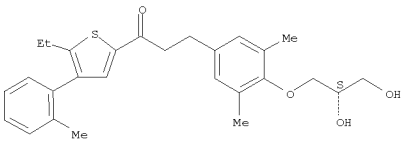
CM 2

CRN 64-18-6
CMF C H2 O2



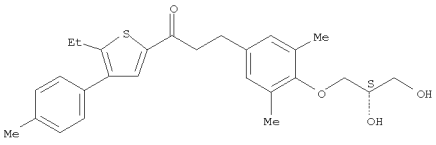
RN 917873-51-9 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-methylphenyl)-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.



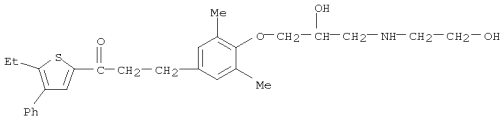
RN 917873-56-4 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(4-methylphenyl)-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 917873-60-0 CAPLUS

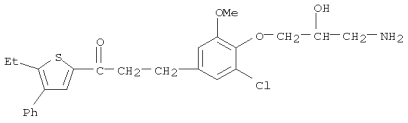
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 917873-42-8 CAPLUS
CN Formic acid, compd. with 3-[4-(3-amino-2-hydroxypropoxy)-3-chloro-5-methoxyphenyl]-1-(5-ethyl-4-phenyl-2-thienyl)-1-propanone (1:1) (CA INDEX NAME)

CM 1

CRN 917873-41-7
CMF C25 H28 Cl N O4 S



CM 2

CRN 64-18-6
CMF C H2 O2



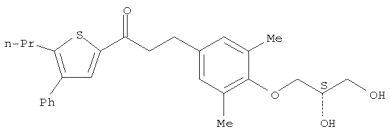
RN 917873-44-0 CAPLUS
CN Formic acid, compd. with 3-[3-chloro-4-[2-hydroxy-3-(methylamino)propoxy]-5-methoxyphenyl]-1-(5-ethyl-4-phenyl-2-thienyl)-1-propanone (1:1) (CA INDEX NAME)

CM 1

CRN 917873-43-9
CMF C26 H30 Cl N O4 S

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)- (CA INDEX NAME)

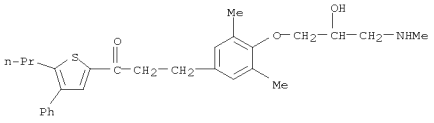
Absolute stereochemistry.



RN 917873-63-3 CAPLUS
CN Formic acid, compd. with 3-[4-[2-hydroxy-3-(methylamino)propoxy]-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)-1-propanone (1:1) (CA INDEX NAME)

CM 1

CRN 917873-62-2
CMF C28 H35 N O3 S



CM 2

CRN 64-18-6
CMF C H2 O2

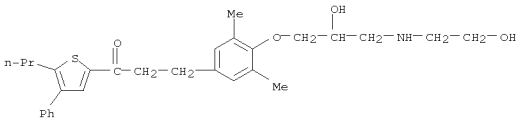


RN 917873-65-5 CAPLUS
CN Formic acid, compd. with 3-[4-[2-hydroxy-3-[(2-hydroxyethyl)amino]propoxy]-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)-1-propanone (1:1) (CA INDEX NAME)

CM 1

CRN 917873-64-4
CMF C29 H37 N O4 S

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

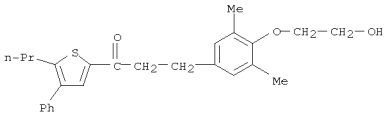


CM 2

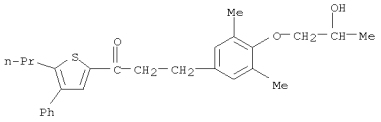
CRN 64-18-6
CMF C H2 O2



RN 917873-66-6 CAPLUS
CN 1-Propanone, 3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)- (CA INDEX NAME)

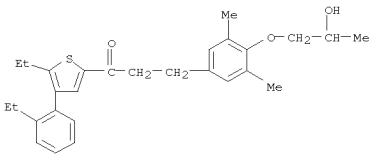


RN 917873-68-8 CAPLUS
CN 1-Propanone, 3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]-1-(4-phenyl-5-propyl-2-thienyl)- (CA INDEX NAME)

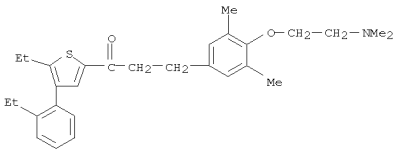


RN 917873-70-2 CAPLUS
CN 1-Propanone, 3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-(4-

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

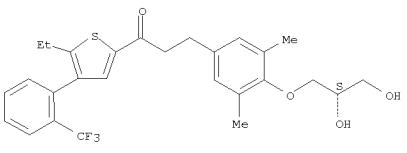


RN 917873-85-9 CAPLUS
CN 1-Propanone,
3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-ethylphenyl)-2-thienyl]- (CA INDEX NAME)



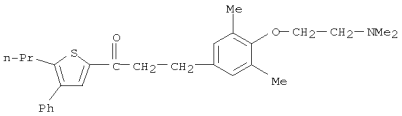
RN 917873-89-3 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-[2-(trifluoromethyl)phenyl]-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.



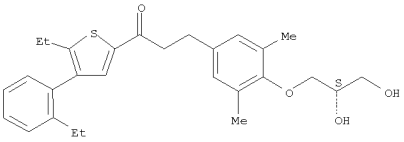
RN 917873-90-6 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-[2-(trifluoromethyl)phenyl]-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
phenyl-5-propyl-2-thienyl)- (CA INDEX NAME)

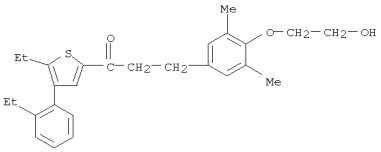


RN 917873-79-1 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-ethylphenyl)-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.

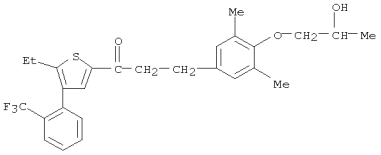


RN 917873-81-5 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-ethylphenyl)-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

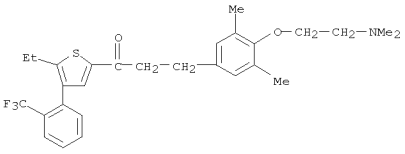


RN 917873-83-7 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-ethylphenyl)-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

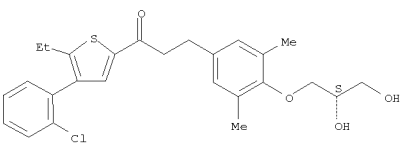


RN 917873-91-7 CAPLUS
CN 1-Propanone,
3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-[2-(trifluoromethyl)phenyl]-2-thienyl]- (CA INDEX NAME)



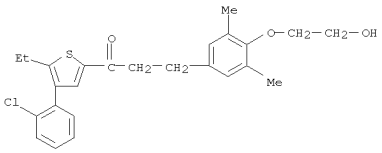
RN 917873-93-9 CAPLUS
CN 1-Propanone, 1-[4-(2-chlorophenyl)-5-ethyl-2-thienyl]-3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]- (CA INDEX NAME)

Absolute stereochemistry.

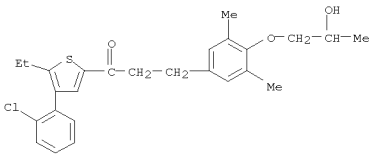


RN 917873-94-0 CAPLUS
CN 1-Propanone, 1-[4-(2-chlorophenyl)-5-ethyl-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

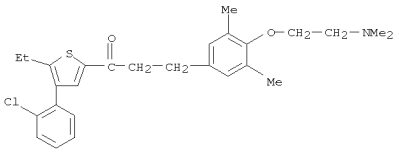
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 917873-95-1 CAPLUS
CN 1-Propanone, 1-[4-(2-chlorophenyl)-5-ethyl-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)



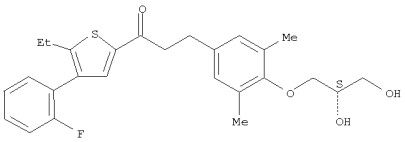
RN 917873-96-2 CAPLUS
CN 1-Propanone, 1-[4-(2-chlorophenyl)-5-ethyl-2-thienyl]-3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]- (CA INDEX NAME)



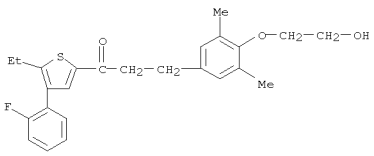
RN 917873-98-4 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-fluorophenyl)-2-thienyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

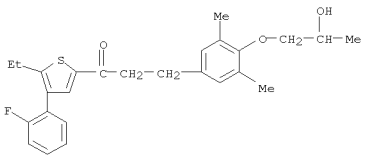
Absolute stereochemistry.



RN 917873-99-5 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-fluorophenyl)-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

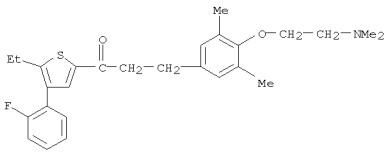


RN 917874-00-1 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-fluorophenyl)-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)



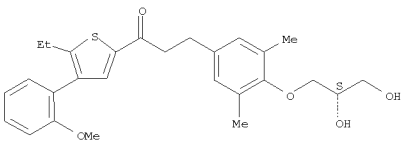
RN 917874-01-2 CAPLUS
CN 1-Propanone, 3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-fluorophenyl)-2-thienyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

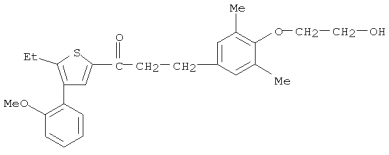


RN 917874-04-5 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-methoxyphenyl)-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.

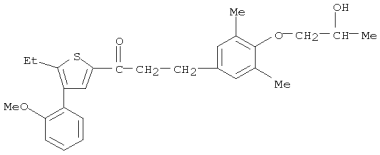


RN 917874-05-6 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-methoxyphenyl)-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

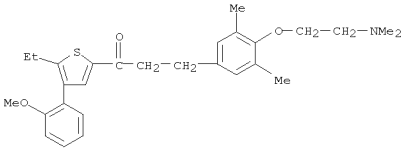


RN 917874-06-7 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(2-methoxyphenyl)-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

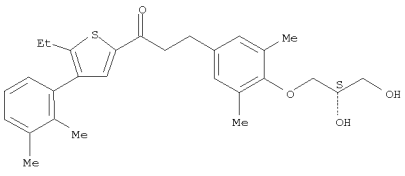


RN 917874-07-8 CAPLUS
CN 1-Propanone, 3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-[5-ethyl-4-(2-methoxyphenyl)-2-thienyl]- (CA INDEX NAME)



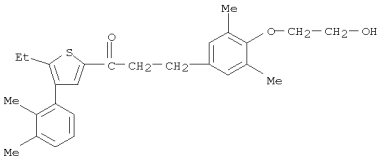
RN 917874-09-0 CAPLUS
CN 1-Propanone, 3-[4-[(2S)-2,3-dihydroxypropoxy]-3,5-dimethylphenyl]-1-[4-(2,3-dimethylphenyl)-5-ethyl-2-thienyl]- (CA INDEX NAME)

Absolute stereochemistry.

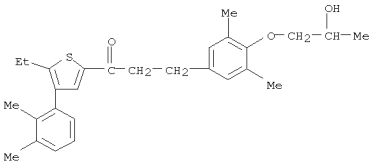


RN 917874-10-3 CAPLUS
CN 1-Propanone, 1-[4-(2,3-dimethylphenyl)-5-ethyl-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

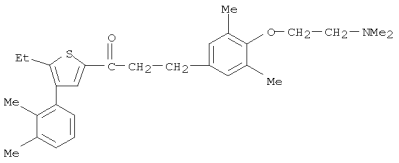
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 917874-11-4 CAPLUS
CN 1-Propanone, 1-[4-(2,3-dimethylphenyl)-5-ethyl-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

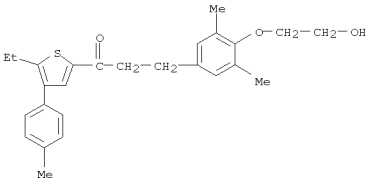


RN 917874-12-5 CAPLUS
CN 1-Propanone, 3-[4-[2-(dimethylamino)ethoxy]-3,5-dimethylphenyl]-1-[4-(2,3-dimethylphenyl)-5-ethyl-2-thienyl]- (CA INDEX NAME)

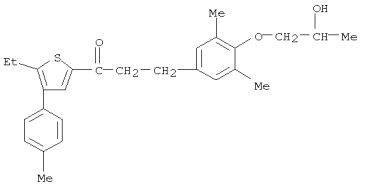


RN 917874-13-6 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(4-methylphenyl)-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)

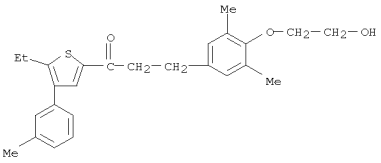
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



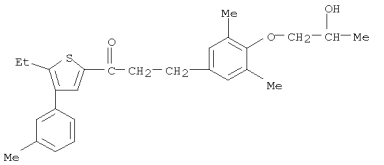
RN 917874-14-7 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(4-methylphenyl)-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)



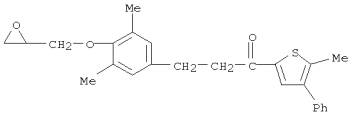
RN 917874-16-9 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(3-methylphenyl)-2-thienyl]-3-[4-(2-hydroxyethoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)



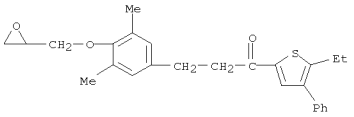
L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 917874-17-0 CAPLUS
CN 1-Propanone, 1-[5-ethyl-4-(3-methylphenyl)-2-thienyl]-3-[4-(2-hydroxypropoxy)-3,5-dimethylphenyl]- (CA INDEX NAME)



IT 917873-25-7P 917873-35-9P 917873-61-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiophene derivs. as S1P1/EDG1 receptor agonists)
RN 917873-25-7 CAPLUS
CN 1-Propanone, 3-[3,5-dimethyl-4-(2-oxiranylmethoxy)phenyl]-1-(5-methyl-4-phenyl-2-thienyl)- (CA INDEX NAME)

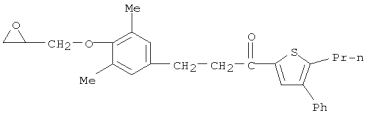


RN 917873-35-9 CAPLUS
CN 1-Propanone, 3-[3,5-dimethyl-4-(2-oxiranylmethoxy)phenyl]-1-(5-ethyl-4-phenyl-2-thienyl)- (CA INDEX NAME)



RN 917873-61-1 CAPLUS
CN 1-Propanone, 3-[3,5-dimethyl-4-(2-oxiranylmethoxy)phenyl]-1-(4-phenyl-5-propyl-2-thienyl)- (CA INDEX NAME)

L19 ANSWER 15 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

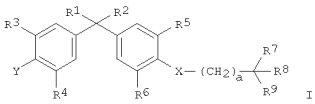
L19 ANSWER 16 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1312155 CAPLUS
DOCUMENT NUMBER: 146:81671
TITLE: Preparation of 3,3-bis(3-methylphenyl)pentane derivatives having vitamin D-like activity
INVENTOR(S): Takahashi, Tadakatsu; Ono, Yoshiyuki; Kashiwagi, Hirotaka; Haneishi, Tuyoshi; Shimizu, Kazuki
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 590pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006132442 | A1 | 20061214 | WO 2006-JP312081 | 20060609 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: JP 2005-169568 A 20050609
JP 2005-259634 A 20050907

OTHER SOURCE(S): MARPAT 146:81671
GI



I

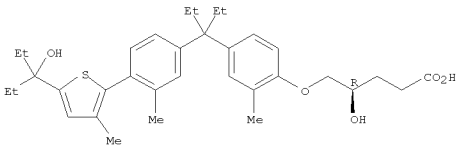
AB The title benzylbenzene compds. [I; R1, R2 = each (un)substituted C1-6 alkyl, C1-6 haloalkyl, C2-6 alkenyl, C2-6 alkynyl, or C1-6 alkoxy; R3-R6 = H, halo, or each (un)substituted C1-6 alkyl, C1-6 haloalkyl, C2-6 alkenyl, C2-6 alkynyl, or C1-6 alkoxy; R7-R9 = H, each (un)protected HO, NH2, or CO2H, (un)substituted C1-10 alkyl, C1-6 haloalkyl; or one of (R7 and R8), (R7 and R9), and (R8 and R9) pairs form (un)substituted C3-10 cycloalkyl, CO, or (un)substituted 3- to 12-membered heterocyclic ring, or C3-7 lactone; X = a direct bond, CH2, CH2CH2, CH:CH, C.tplbond.C, O, S, NH, CO, (un)substituted C6-12 aryl, 3- to 12-membered heterocyclic ring; Y = each (un)substituted C6-12 aryl, 3- to 12-membered heterocyclic ring, or C1-6 alkoxy; provided that when Y is (un)substituted C1-6 alkoxy, then X is selected from each (un)substituted C6-12 aryl and 3- to 12-membered heterocyclic ring; a = an integer of 0-3] or pharmacol. acceptable salts thereof are prepd. These compds. or pharmaceutically acceptable salts thereof are useful as pharmaceuticals for the treatment of benign prostatic hyperplasia, cancer, osteoporosis, psoriasis, secondary hyperparathyroidism, chronic glomerulonephritis, lupus nephritis and/or diabetic nephropathy, or the like. Thus, tert-butyl[1-[2-[4-[1-ethyl-1-[4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-3-methylphenyl]propyl]-2-methylphenyl]ethyl]-2,2-dimethylpropoxy]dimethylsilane was coupled with 2-chloropyridine-5-acetic acid Et ester in the presence of [1,1'-bis(diphenylphosphino)ferrocene]dichloropalladium(II)-dichloromethane (1:1) complex in DMF at 76-84° for 7.5 h to give, after deprotection, chiral [6-[4-[1-ethyl-1-[4-(3-hydroxy-4,4-dimethylpentyl)-3-methylphenyl]propyl]-2-methylphenyl]pyridin-3-yl]acetic acid (II). II in vitro induced the prodn. of osteocalcin with relative EC50 value of 3,264% compared to 100% for 1,25-dihydroxyvitamin D3 in human osteoblastic cell MG-63 and the prodn. of ECA2 mRNA with relative EC50 value 88% compared to 556% for 1,25-sihydroxyvitamin D3 in Caco-2 cells. It exhibited good sepn. of osteocalcin-inducing activity from the activity for prodn. of ECA2 mRNA (side effect) and thereby showed high osteocalcin-inducing activity and weak serum calcium-increasing activity.

IT 917022-83-4P, (R)-5-[[4-[1-Ethyl-1-[4-[5-(1-ethyl-1-hydroxypropyl)-3-(methyl)thiophen-2-yl]-3-methylphenyl]propyl]-2-methylphenyl]oxy]-4-hydroxypentanoic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 3,3-bis(3-methylphenyl)pentane derivs. having vitamin D-like activity)

RN 917022-83-4 CAPLUS
CN Pentanoic acid, 5-[4-[1-ethyl-1-[4-[5-(1-ethyl-1-hydroxypropyl)-3-methyl-2-thienyl]-3-methylphenyl]propyl]-2-methylphenoxy]-4-hydroxy-, (4R)- (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 16 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

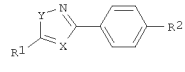
L19 ANSWER 17 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1311129 CAPLUS
DOCUMENT NUMBER: 146:62699
TITLE: Preparation of polycyclic oxadiazoles or isoxazoles as S1P receptor ligands
INVENTOR(S): Albert, Rainer; Weiler, Sven; Zecri, Frederic
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 53pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006131336 | A1 | 20061214 | WO 2006-EP5422 | 20060607 |

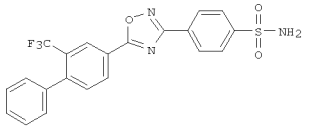
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: GB 2005-11684 A 20050608
GB 2005-25064 A 20051208
GB 2006-405 A 20060110

OTHER SOURCE(S): MARPAT 146:62699
GI



I



II

L19 ANSWER 17 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title compds. represented by the formula I [wherein X = -N=, Y = O; X = -O-, Y = -N=; R1 = substituted biphenyl, 4-phenoxyphenyl or 4-(phenylalkoxy)phenyl; R2 = (un)substituted alkyl, amino, sulfamoyl, etc.; and physiol. hydrolyzable derivs., hydrates or solvates thereof] were prepared as sphingosine-1-phosphate (S1P) receptor ligands. For example, II was provided in a multi-step synthesis starting from 4-chloro-3-trifluoromethylbenzoic acid. I showed binding affinity to human S1P1 receptor with EC50 < 1 nM, are active in in vitro FLIPR calcium flux assay at a concentration of from 10-12-3.10-5 nM, and have EC50 of less than 10 mg/kg in in vivo screening assays for measurement of blood lymphocyte depletion. Thus, I and their pharmaceutical compns. are useful as S1P receptor ligands, particularly as immunosuppressants.

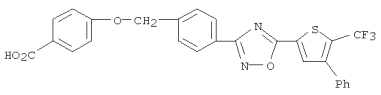
IT 916804-91-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of polycyclic oxadiazoles or isoxazoles as S1P receptor ligands)

RN 916804-91-6 CAPLUS

CN Benzoic acid, 4-[[4-[5-[4-phenyl-5-(trifluoromethyl)-2-thienyl]-1,2,4-oxadiazol-3-yl]phenyl]methoxy]- (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1253322 CAPLUS

DOCUMENT NUMBER: 146:45734

TITLE: Preparation of N-terminally modified GLP-1 receptor modulators and their use in the treatment of diabetes and related conditions

INVENTOR(S): Ewing, William R.; Mapelli, Claudio; Riexinger, Douglas James; Lee, Ving G.; Sulsky, Richard B.; Zhu, Yeheng

PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA

SOURCE: PCT Int. Appl., 186pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006127948 | A2 | 20061130 | WO 2006-US20332 | 20060526 |
| WO 2006127948 | A3 | 20070419 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2005-684805P P 20050526

OTHER SOURCE(S): MARPAT 146:45734

AB The invention provides novel human glucagon-like peptide-1 (GLP-1) receptor modulators Xaa1-Xaa2-Xaa3-Xaa4-Xaa5-Xaa6-Xaa7-Xaa8-Xaa9-Xaa10-Xaa11 [Xaa1-Xaa3, Xaa5-Xaa11 are (certain) naturally or non-naturally occurring amino acid residues; Xaa4 is glycine] that have biol. activity similar or superior to native GLP-1 peptide and thus are useful for the treatment or prevention of diseases or disorders associated with GLP activity. The compds. include chemical-modified peptides that not only stimulate insulin secretion in type II diabetics, but also produce other beneficial insulinotropic responses. These synthetic peptide GLP-1 receptor modulators exhibit increased stability to proteolytic cleavage making them ideal therapeutic candidates for oral or parenteral administration. The disclosed and claimed peptides show desirable pharmacokinetic properties and desirable potency in efficacy models of diabetes. Thus, claimed peptide H-H-Aib-EGT-L-α-MePhe(2-fluoro)-TSD-Bip(2'-Et-4'-OMe)-4-(2'-methylphenyl)-3-pyridylalanine-NH2 (H, E, G, T, S and D are one-letter amino acid symbols, Aib = α-aminoisobutyric acid residue, Bip = biphenylalanine residue) was prepared by the solid-phase method and shown to produce a time-dependent statistically significant

L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

decrease in postprandial plasma glucose following s.c. administration in ob/ob mice.

IT 916247-92-2P 916247-93-3P 916247-94-4P 916247-95-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

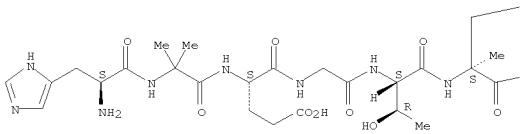
(preparation of N-terminally modified GLP-1 receptor modulators and their use in treatment of diabetes and related conditions)

RN 916247-92-2 CAPLUS

CN L-Alaninamide, L-histidyl-2-methylalanyl-L-α-glutamylglycyl-L-threonyl-2-fluoro-α-methyl-L-phenylalanyl-L-threonyl-L-seryl-L-α-asparty1-3-(2'-ethyl-4'-methoxy[1,1'-biphenyl]-4-yl)-L-alanyl-3-[5-(2-methylphenyl)-2-thienyl]- (CA INDEX NAME)

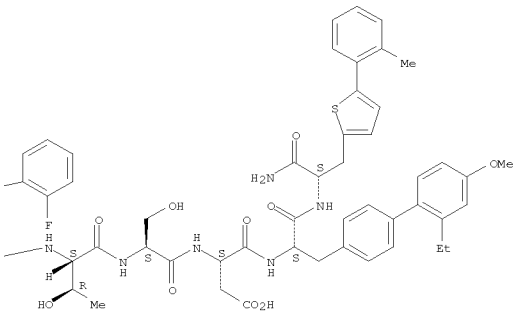
Absolute stereochemistry.

PAGE 1-A



L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

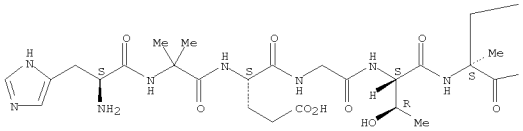


RN 916247-93-3 CAPLUS

CN L-Alaninamide, L-histidyl-2-methylalanyl-L-α-glutamylglycyl-L-threonyl-2-fluoro-α-methyl-L-phenylalanyl-L-threonyl-L-seryl-L-α-asparty1-3-(2'-ethyl-4'-methoxy[1,1'-biphenyl]-4-yl)-L-alanyl-3-[5-(3-methoxyphenyl)-2-thienyl]- (CA INDEX NAME)

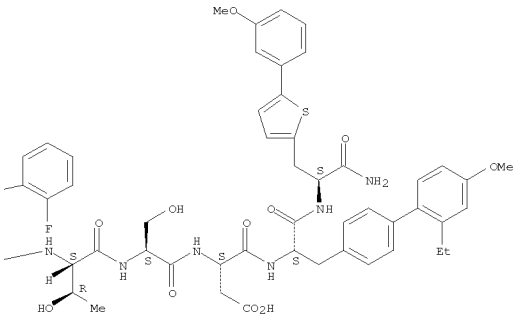
Absolute stereochemistry.

PAGE 1-A



L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

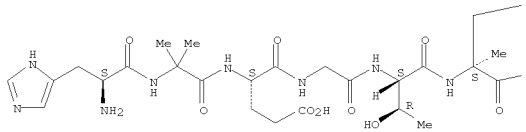


RN 916247-94-4 CAPLUS
CN L-Alaninamide, L-histidyl-2-methylalanyl-L-α-glutamylglycyl-L-threonyl-2-fluoro-α-methyl-L-phenylalanyl-L-threonyl-L-seryl-L-α-asparty1-3-(2'-ethyl-4'-methoxy[1,1'-biphenyl]-4-yl)-L-alanyl-3-[5-(3,5-dimethylphenyl)-2-thienyl]- (CA INDEX NAME)

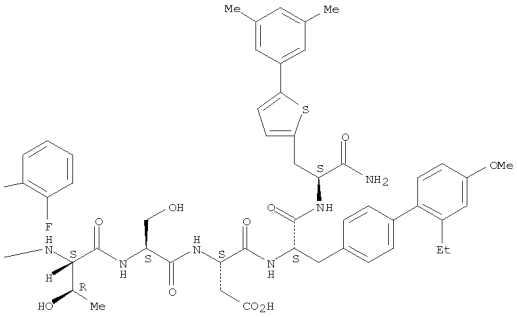
Absolute stereochemistry.

L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

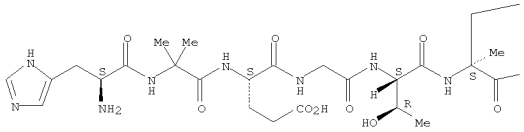


L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 916247-95-5 CAPLUS
CN L-Alaninamide, L-histidyl-2-methylalanyl-L-α-glutamylglycyl-L-threonyl-2-fluoro-α-methyl-L-phenylalanyl-L-threonyl-L-seryl-L-α-asparty1-3-(2'-ethyl-4'-methoxy[1,1'-biphenyl]-4-yl)-L-alanyl-3-[5-(3-chloro-5-fluorophenyl)-2-thienyl]- (CA INDEX NAME)

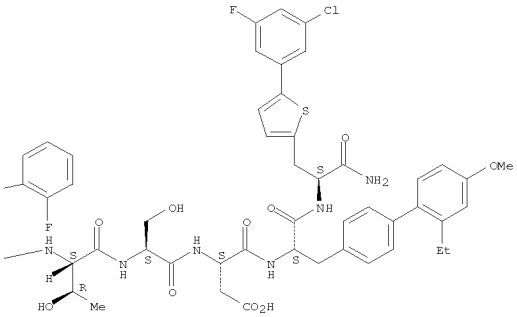
Absolute stereochemistry.

PAGE 1-A



L19 ANSWER 18 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



L19 ANSWER 19 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1253006 CAPLUS
DOCUMENT NUMBER: 146:35942
TITLE: Photochromic and electrochromic compounds and synthesis and use thereof
INVENTOR(S): Branda, Neil R.; Wuestenberg, Bettina; Lemieux, Vincent; Adams, Michael; Gauthier, Simon
PATENT ASSIGNEE(S): Simon Fraser University, Can.
SOURCE: PCT Int. Appl., 61pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

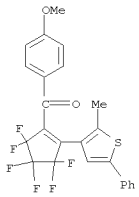
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006125317 | A1 | 20061130 | WO 2006-CA862 | 20060525 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

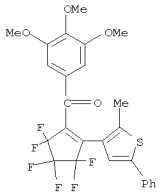
PRIORITY APPLN. INFO.: US 2005-684715P P 20050525

OTHER SOURCE(S): MARPAT 146:35942
AB Novel photochromic and electrochromic hexadiene compds. are described. The compds. are reversibly convertible between ring-open and ring-closed isomeric forms. The conversion between the different isomeric forms may be induced by light or electricity. In one embodiment the compds. may include a charge transfer moiety including electron donor and acceptor groups. The electron donor and acceptor are linearly conjugated in the ring-open form to enable electron transfer but are elec. insulated in the ring-closed form. Methods for synthesizing the compds. from photochem. and/or elec. inert precursors are also described. For example, the photoresponsive compds. may be synthesized by reacting diene precursors with dienophiles in a condensation reaction. The compds. may be utilized in reactivity-gated photochromic or electrochromic applications. In one embodiment of the invention, compds. of the invention may be used in a method to selectively release a releasable agent, such as a small mol. According to this method, a photochem. inert precursor compound is reacted with the releasable agent to form a carrier compound comprising a switching moiety, the switching moiety being reversibly convertible between a thermally unstable form and a thermally stable form. The switching moiety

L19 ANSWER 19 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
may be selectively converted between the first and second forms to cause controlled release of the releasable agent from the carrier compd.
IT 869207-54-5P 915951-76-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photochromic and electrochromic compds. and synthesis and use thereof)
RN 869207-54-5 CAPLUS
CN Methanone, [3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](4-methoxyphenyl)- (CA INDEX NAME)

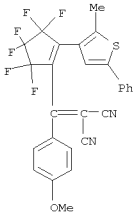


RN 915951-76-7 CAPLUS
CN Methanone, [3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](3,4,5-trimethoxyphenyl)- (CA INDEX NAME)

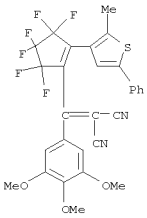


IT 869207-58-9P 915951-79-0P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(photochromic and electrochromic compds. and synthesis and use thereof)

L19 ANSWER 19 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 869207-58-9 CAPLUS
CN Propanedinitrile, 2-[[3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](4-methoxyphenyl)methylene]- (CA INDEX NAME)



RN 915951-79-0 CAPLUS
CN Propanedinitrile, 2-[[3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](3,4,5-trimethoxyphenyl)methylene]- (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 20 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1206741 CAPLUS
DOCUMENT NUMBER: 145:489228
TITLE: Preparation of thiazole compounds for treating Hepatitis C virus infections
INVENTOR(S): Zhang, Suoming; Phadke, Avinash; Liu, Cuixian; Wang, Xiangzhu; Quinn, Jesse; Chen, Dawei; Gadhachanda, Venkat; Li, Shouming; Deshpande, Milind
PATENT ASSIGNEE(S): Achillion Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 254pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006122011 | A2 | 20061116 | WO 2006-US17692 | 20060509 |
| WO 2006122011 | A3 | 20070503 | | |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

| | | | | |
|---|---|---|---|---|
| US 2007004711 | A1 | 20070104 | US 2006-431155 | 20060509 |

PRIORITY APPLN. INFO.: US 2005-679133P P 20050509

OTHER SOURCE(S): MARPAT 145:489228
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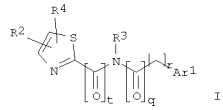

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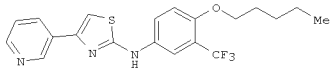


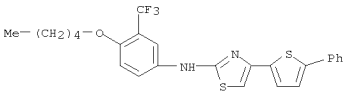
II

AB The title compds. I [Ar1 = fluorenyl, Ph, naphthyl, etc.; R2 = halo, CO2H,

L19 ANSWER 20 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CONH2, etc.; R3 = H, alkyl, C(O)R5 (wherein R5 = alkyl, Ph, 5-6 membered heteroaryl); R4 = H, halo, OH, etc.; or R2 and R4 are taken together with the carbon atoms of the thiazole ring to which they are attached to form 5-7 membered carbocyclic ring which is arom. or partially unsatd.; r = 0-2; q = 0-1; t = 0-1] that are potent and/ or selective inhibitors of Hepatitis C virus replication, were prepd. Thus, bromination of 3-acetylpyridine with Br2 followed by reacting 2-bromo-1-(pyridin-3-yl)ethanone with N-(4-pentyloxy-3-trifluoromethylphenyl)thiourea afforded II which showed EC50 of < 1 μM when tested in a replicon based assay of HCV replication inhibition. Certain compds. I inhibit assembly of the HCV replication complex. The invention also provides pharmaceutical compns. contg. one or more compds. I , or a salt, solvate, or acylated prodrug of such compds., and one or more pharmaceutically acceptable carriers, excipients, or diluents. The invention further comprises methods of treating patients suffering from certain infectious diseases by administering to such patients an amt. of a compd. I effective to reduce signs or symptoms of the disease. These infectious diseases include viral infections, particularly HCV infections. The invention particularly includes methods of treating human patients suffering from an infectious disease, but also encompasses methods of treating other animals, including livestock and domesticated companion animals, suffering from an infectious disease. Methods of treatment include administering a compd. I as a single active agent or administering a compd. I in combination with on or more other therapeutic agent.

IT 914659-52-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiazole compds. for treating Hepatitis C virus infections)

RN 914659-52-2 CAPLUS
CN 2-Thiazolamine, N-[4-(pentyloxy)-3-(trifluoromethyl)phenyl]-4-(5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:1184850 CAPLUS
DOCUMENT NUMBER: 146:122741
TITLE: Energy and Charge Transfer Dynamics in Fully Decorated Benzyl Ether Dendrimers and Their Disubstituted Analogues
AUTHOR(S): Ahn, Tai-Sang; Nantalaksakul, Arpornrat; Dasari, Raghunath R.; Al-Kaysi, Rabih O.; Mueller, Astrid M.; Thayumanavan, S.; Bardeen, Christopher J.
CORPORATE SOURCE: Department of Chemistry, University of California, Riverside, CA, 92521, USA
SOURCE: Journal of Physical Chemistry B (2006), 110(48), 24331-24339
CODEN: JPCBFK; ISSN: 1520-6106
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

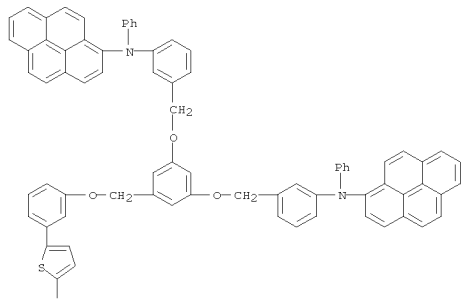
AB The photophysics were studied of a series of mols. consisting of a benzthiadiazole core surrounded by a network of benzyl ether arms terminated by aminopyrene chromophores, which function as both energy and electron donors. Three classes of mols. were studied: dendrimers whose peripheries are fully decorated with aminopyrene donors (F), disubstituted dendrimers whose peripheries contain only two donors (D), and linear analogs in which a pair of benzyl ether arms link two donors to the central core (L). The electronic energy transfer (EET) and charge transfer (CT) rates were determined by fluorescence lifetime measurements on the energy donors and electron acceptors, resp. In all three types of mols., the EET time scales as the square root of the generation number G, consistent with the flexible nature of the benzyl ether framework. Transient anisotropy measurements confirm that donor-donor energy hopping does not play a major role in determining the EET times. The CT dynamics occur on the nanosecond time scale and lead to stretched exponential decays, probably due to conformational disorder. Measurements at 100° confirm that conformational fluctuations play a role in the CT dynamics. The average CT time increases with G in the L and D mols. but decreases for the F dendrimers. This divergent behavior as G increases is attributed to the competing effects of larger donor-acceptor distances (which lengthen the CT time) vs. a larger number of donors (which shorten the average CT time). This work illustrates two important points about light-harvesting and charge-separation dendrimers. First, the use of a flexible dendrimer framework can lead to a more favorable scaling of the EET time (and thus the light-harvesting efficiency) with dendrimer size, relative to what would be expected for a fully extended dendrimer. Second, fully decorated dendrimers can compensate for the distance-dependent slowdown in CT rate as G increases by providing addnl. pathways for the CT reaction to occur.

IT 840531-18-2 903562-03-8 903562-04-9
903562-05-0 903562-06-1 903562-07-2

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PRP (Properties)
(energy and charge transfer dynamics in fully decorated benzyl ether dendrimers with aminopyrene end groups)

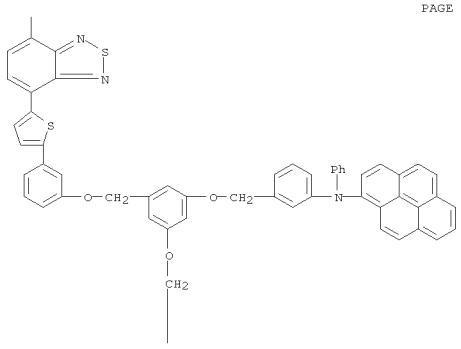
RN 840531-18-2 CAPLUS
CN 1-Pyrenamine, N,N',N'',N'''-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene-5,1,3-benzenetriylbis(oxymethylene-3,1-phenylene)]]tetrakis[N-phenyl- (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



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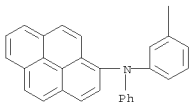
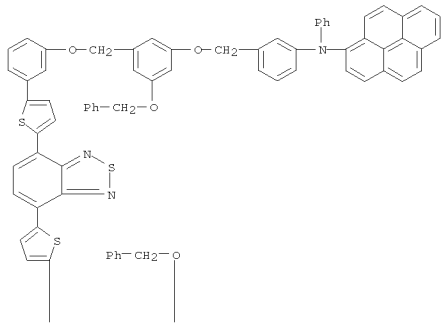


RN 903562-03-8 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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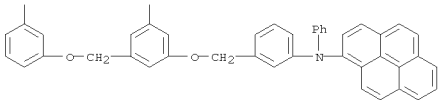
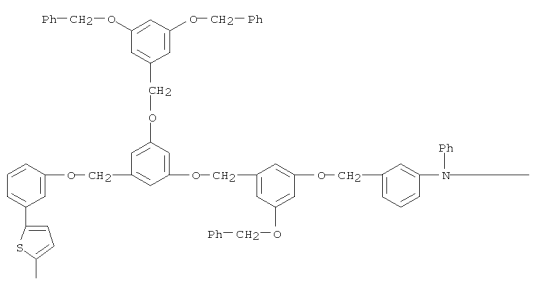


RN 903562-04-9 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-[[3,5-bis(phenylmethoxy)phenyl]methoxy]-3,1-phenylene]oxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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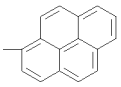

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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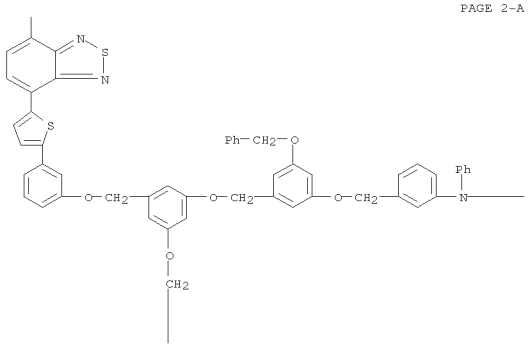

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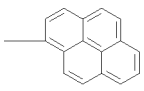

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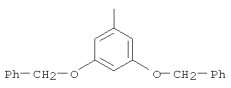

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 903562-05-0 CAPLUS
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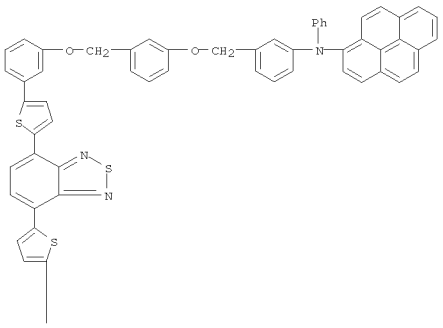
PAGE 1-A



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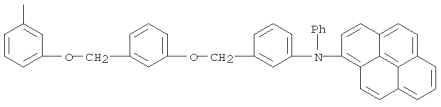
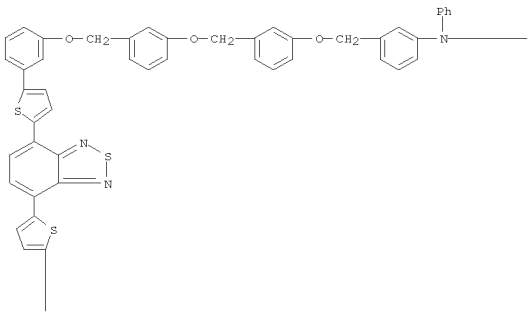


RN 903562-06-1 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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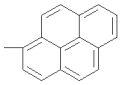

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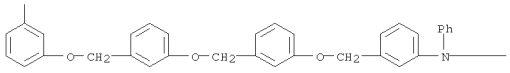

L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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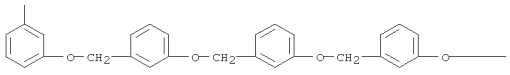

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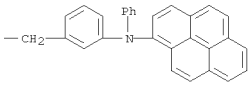
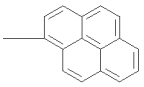


REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

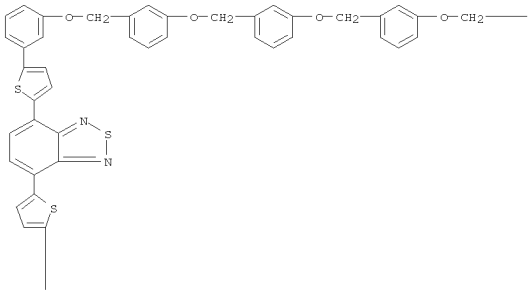
L19 ANSWER 21 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B



RN 903562-07-2 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

PAGE 1-A



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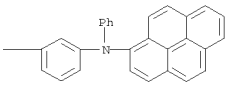

L19 ANSWER 22 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:1096947 CAPLUS
DOCUMENT NUMBER: 145:438628
TITLE: Preparation of triazole-4-carboxamide derivatives as thrombin receptor antagonists
INVENTOR(S): Kubo, Keiji; Tobisu, Mamoru; Honda, Eiji; Taniguchi, Takahiko; Fukase, Yoshiyuki; Kawamura, Masaki; Nakayama, Masaharu
PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan
SOURCE: PCT Int. Appl., 598pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006109846 | A1 | 20061019 | WO 2006-JP307797 | 20060406 |

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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

| | | | |
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| PRIORITY APPLN. INFO.: | | JP 2005-110391 | A 20050406 |
| OTHER SOURCE(S): | MARPAT 145:438628 | | |

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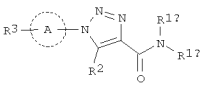
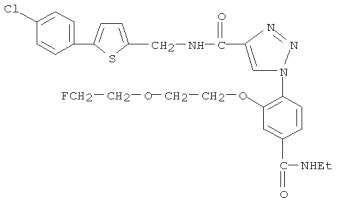


I

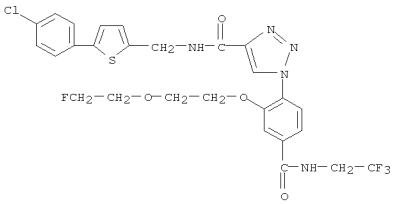
AB The invention relates to a thrombin receptor antagonist comprising a compound represented by the formula (I) [R1a, R1b, R2 = independently H or each (un)substituted hydrocarbon, heterocyclic, or alkoxy; R3 = a group represented by any of the formulas, -NHCOR4, -NHSO2R5, -NHCON(R6a)(R6b), -NHCOOR7 and -CONHR8; wherein R4, R5, R6a, R6b, R7, R8 = independently H or each (un)substituted hydrocarbon, heterocyclic, or alkoxy group; the ring A represents an (un)substituted monocyclic aromatic ring; R2 and a substituent other than R3 on the ring A may be bound to each other to form an (un)substituted ring; R8 and a substituent on the ring A may be bound to each other to form an (un)substituted ring; or R1a and R2 may be bound to each other to form an (un)substituted ring; or R1a and R1b may be bound

L19 ANSWER 22 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
to each other to form an (un)substituted nitrogen-contg. nonarom. heterocyclic ring], or a salt thereof or a prodrug thereof. The thrombin receptor antagonist of the invention has a thrombin receptor (particularly
PAR-1) antagonism and is useful for preventing or treating PAR-1 assocd. pathol. conditions or diseases, e.g. vein or artery thrombus such as cerebral infarction, myocardial infarction, and acute heart failure. Thus, 1-(4-aminophenyl)-N-cyclopropyl-5-propyl-1H-1,2,3-triazole-4-carboxamide was condensed with 3,3,3-trifluoropropanoic acid using 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride , HOBt, and Et3N in MeCN overnight at room temp. to give 43% N-Cyclopropyl-5-propyl-1-[4-[(3,3,3-trifluoropropanoyl)amino]phenyl]-1H-1,2,3-triazole-4-carboxamide (II). II inhibited the increase in cellular calcium concn. in
CHO cells expressing human PAR-1 with IC50 of 0.094 μM. Pharmaceutical formulations, e.g. a capsule and tablet formulation contg.

N-cyclopropyl-1-[4-[[(ethylamino)carbonyl]amino]phenyl]-5-propyl-1H-1,2,3-triazole-4-carboxamide, were described.
IT 912834-29-8P, N-[[5-(4-Chlorophenyl)-2-thienyl]methyl]-1-[4-[(ethylamino)carbonyl]-2-[2-(2-fluoroethoxy)ethoxy]phenyl]-1H-1,2,3-triazole-4-carboxamide 912835-11-1P, N-[[5-(4-Chlorophenyl)-2-thienyl]methyl]-1-[2-[2-(2-fluoroethoxy)ethoxy]-4-[[(2,2,2-trifluoroethyl)amino]carbonyl]phenyl]-1H-1,2,3-triazole-4-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triazolecarboxamide derivs. as thrombin receptor antagonists
for treatment or prevention of vein or artery thrombus)
RN 912834-29-8 CAPLUS
CN 1H-1,2,3-Triazole-4-carboxamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-1-[4-[(ethylamino)carbonyl]-2-[2-(2-fluoroethoxy)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

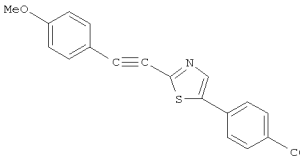


L19 ANSWER 22 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 912835-11-1 CAPLUS
CN 1H-1,2,3-Triazole-4-carboxamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-1-[2-[2-(2-fluoroethoxy)ethoxy]-4-[[(2,2,2-trifluoroethyl)amino]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

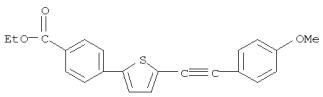


REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 23 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:904044 CAPLUS
DOCUMENT NUMBER: 145:471433
TITLE: Introduction of ethynylene and thienylene spacers into
2,5-diarylthiazole and 2,5-diarylthiophene
AUTHOR(S): Kobayashi, Kei; Mohamed Ahmed, Mohamed S.; Mori, Atsunori
CORPORATE SOURCE: Chemical Resources Laboratory, Tokyo Institute of Technology, Yokohama, 226-8503, Japan
SOURCE: Tetrahedron (2006), 62(41), 9548-9553
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:471433
GI



AB Syntheses of 2,5-diarylthiazole and 2,5-diarylthiophene derivs. bearing ethynylene and thienylene spacers (e.g. I) are performed. With methods for coupling reactions of terminal alkynes and at the CH bond of heteroarom. compds., five kinds of thiazole and thiophene derivs. are prepared
IT 913627-45-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 2,5-diarylthiazole and 2,5-diarylthiophene derivs. bearing
ethynylene and thienylene spacers via Pd-catalyzed coupling reactions of terminal alkynes and heteroarom. compds.)
RN 913627-45-9 CAPLUS
CN Benzoic acid, 4-[5-[(4-methoxyphenyl)ethynyl]-2-thienyl]-, ethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS

L19 ANSWER 23 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 24 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:887897 CAPLUS
DOCUMENT NUMBER: 145:293047
TITLE: Preparation of heterocyclic compounds as activators for peroxisome proliferator activated receptor δ
INVENTOR(S): Sakuma, Shogo; Mochiduki, Nobutaka; Takahashi, Rie; Hirai, Toshitake; Yamakawa, Tomio; Masui, Seiichiro
PATENT ASSIGNEE(S): Nippon Chemiphar Co., Ltd., Japan
SOURCE: PCT Int. Appl., 115pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2006090920 | A1 | 20060831 | WO 2006-JP304193 | 20060228 |

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PRIORITY APPLN. INFO.: JP 2005-52762 A 20050228

OTHER SOURCE(S): MARPAT 145:293047
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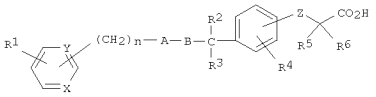
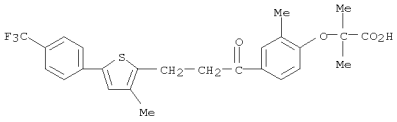


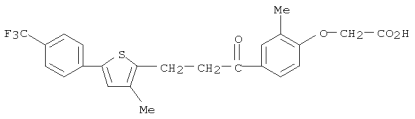
I

AB The title compds. I [R1, R4 = H, alkyl, alkenyl, etc.; R2 = H; R3 = alkyl; or CR2R3 is CO, or CR2R3 is C=CR7R8; R7, R8 = H, alkyl; R5, R6 = H, alkyl, haloalkyl; X, Y = CH, N; Z = O, S; A = (un)substituted pyrazole, thiophene, furan, or pyrrole ring; B = (un)substituted alkylene; n = 0 - 5] are prepared Thus, 2-[4-[3-[3-isopropyl-1-(4-trifluoromethylphenyl)-1H-pyrazol-4-yl]propionyl]-2-methylphenoxy]-2-methylpropionic acid was prepared

L19 ANSWER 24 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
in a multistep process from [3-isopropyl-1-(4-trifluoromethylphenyl)-1H-pyrazol-4-yl]methanol. In an assay for the activation of peroxisome proliferator-activated receptor δ, compds. of this invention showed high activity.
IT 908250-77-1P 908250-81-7P 908250-97-5P
908251-01-4P 908251-03-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic compds. as activators for peroxisome proliferator-activated receptor δ)
RN 908250-77-1 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

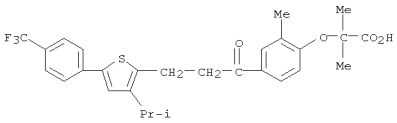


RN 908250-81-7 CAPLUS
CN Acetic acid, [2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

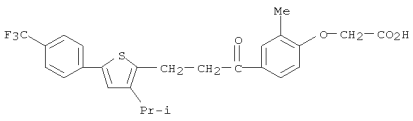


RN 908250-97-5 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

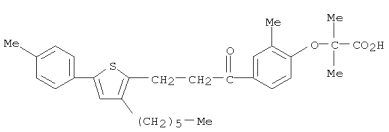
L19 ANSWER 24 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 908251-01-4 CAPLUS
CN Acetic acid, [2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]- (9CI) (CA INDEX NAME)

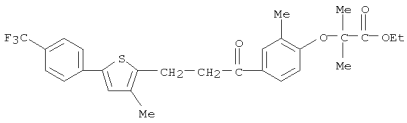


RN 908251-03-6 CAPLUS
CN Propanoic acid, 2-[4-[3-[3-hexyl-5-(4-methylphenyl)-2-thienyl]-1-oxopropyl]-2-methylphenoxy]-2-methyl- (9CI) (CA INDEX NAME)

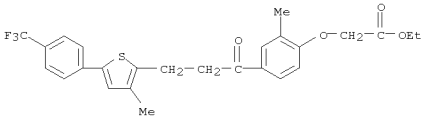


IT 908250-75-9P 908250-79-3P 908250-95-3P
908250-99-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of heterocyclic compds. as activators for peroxisome proliferator-activated receptor δ)
RN 908250-75-9 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

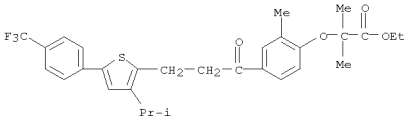
L19 ANSWER 24 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



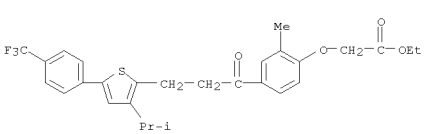
RN 908250-79-3 CAPLUS
CN Acetic acid, [2-methyl-4-[3-[3-methyl-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



RN 908250-95-3 CAPLUS
CN Propanoic acid, 2-methyl-2-[2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

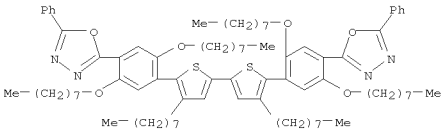


RN 908250-99-7 CAPLUS
CN Acetic acid, [2-methyl-4-[3-[3-(1-methylethyl)-5-[4-(trifluoromethyl)phenyl]-2-thienyl]-1-oxopropyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



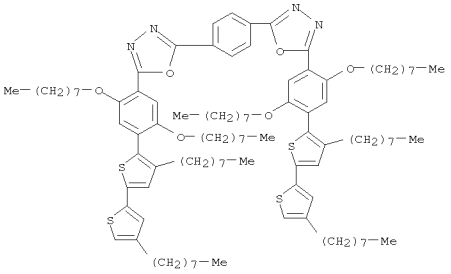
L19 ANSWER 24 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 25 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:848440 CAPLUS
DOCUMENT NUMBER: 145:230948
TITLE: Effective tuning of HOMO and LUMO energy levels by p-n
diblock and triblock oligomer approaches. [Retraction of document cited in CA144:451030]
AUTHOR(S): Wan, Jun-Hua; Feng, Jia-Chun; Wen, Gui-An; Wei, Wei; Fan, Qu-Li; Wang, Chuan-Ming; Wang, Hong-Yu; Zhu, Rui;
Yuan, Xiang-Dong; Huang, Chun-Hui; Wei, Huang.
CORPORATE SOURCE: Institute of Advanced Materials (IAM), Fudan University, Shanghai, 200433, Peop. Rep. China
SOURCE: Journal of Organic Chemistry (2006), 71(18), 7124
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The manuscript was withdrawn from publication by the Journal of Organic Chemical
(JOC) Editor-in-Chief. The basis for the withdrawal was a violation of the Ethical Guidelines to Publication of Chemical Research of the American
Cancer Society. Essentially the same material was submitted to and published by another journal while the manuscript was under review by JOC.
The corresponding author did not withdraw the JOC manuscript or otherwise inform the Editor-in-Chief of the dual submissions.
IT 885481-72-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(OT2O oligomer; preparation of thiophene and oxadiazole monomers and coupling to obtain p-n oligomers with effective tuning of HOMO and LUMO
energy levels (Retraction))
RN 885481-72-1 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-[(4,4'-dioctyl[2,2'-bithiophene]-5,5'-diyl)bis[2,5-bis(octyloxy)-4,1-phenylene]]bis[5-phenyl- (9CI) (CA INDEX NAME)



IT 885481-73-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(T2O2T2 oligomer; preparation of thiophene and oxadiazole monomers and coupling to obtain p-n oligomers with effective tuning of HOMO and LUMO

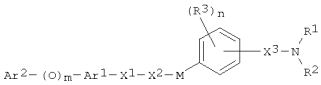
L19 ANSWER 25 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
energy levels (Retraction))
RN 885481-73-2 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-(1,4-phenylene)bis[5-[4-(4,4'-dioctyl[2,2'-bithiophen]-5-yl)-2,5-bis(octyloxy)phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 26 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:652642 CAPLUS
DOCUMENT NUMBER: 145:124334
TITLE: Benzene amide derivatives as melanin-concentrating hormone receptor antagonists, pharmaceutical compositions containing them
INVENTOR(S): Masui, Moriyasu; Yukioka, Hideo; Iwakawa, Tsuneo; Hasegawa, Yasushi
PATENT ASSIGNEE(S): Shionogi and Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 88 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2006176443 | A | 20060706 | JP 2004-371516 | 20041222 |
| PRIORITY APPLN. INFO.: | | | JP 2004-371516 | 20041222 |

OTHER SOURCE(S): MARPAT 145:124334
GI



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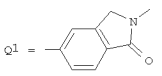
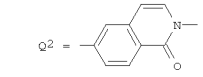
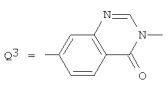
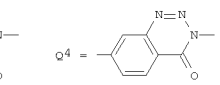


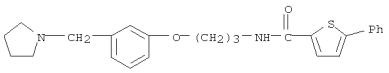






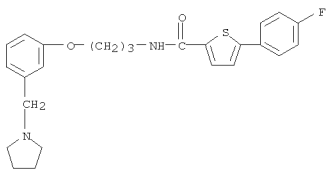
AB Benzene derivs. I [Ar1 = (un)substituted C3-8 cycloalkanediyl, (un)substituted (hetero)arylene, (un)substituted nonarom. heterocyclylene;
Ar2 = (un)substituted C3-8 cycloalkyl, (un)substituted (hetero)aryl, (un)substituted nonarom. heterocyclyl; R1, R2 = C1-6 alkyl or NR1N2 = (un)substituted 5-6-membered nonarom. cyclyl optionally containing 1 selected

L19 ANSWER 26 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
from O, S, N(C1-6 alkyl), N(aryl); R3 = halo, C1-6 (halo)alkyl, C1-6 (halo)alkoxy, (un)substituted Ph, NO2, cyano; X1 = C(:Z1)NR4, NR5C(:Z2), NR5C(:Z3)NR4, CO, C(:NY1) (R4, R5 = H, C1-6 alkyl; Y1 = OH, C1-6 alkoxy, cyano; Z1, Z2, Z3 = O, S); Ar1X1 may be condensed N-heterocyclic group Q1,
Q2, Q3, Q4, etc.; X2 = C1-6 alkylene; X3 = C1-6 alkylene, O-C2-6 alkylene;
X3 and R2 may be bonded together to form a pyrrolidine or piperidine ring;
M = O, S; m = 0, 1; n = 0, 1, 2, 3], their pharmaceutically acceptable salts, and their solvates inhibit appetite and are useful for prevention and treatment of obesity, diabetes, arteriosclerosis, gonarthrosis, etc. Thus, 3-(pyrrolidinomethyl)phenol 3-aminopropyl ether (prepn. given) was condensed with 4-PhOC6H4NCO in toluene under reflux for 16 h to give 70% I
[Ar2(O)mAr1X1X2M = 4-PhOC6H4NHCONH(CH2)3O-4, 3-X3NR1R2 = pyrrolidinomethyl] (II). II antagonized inhibitory effect of MHC on forskolin-induced cAMP prodn. mediated by human melanin-concg. hormone receptor on CHO cells.
IT 897405-96-8P 897405-97-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzene amide derivs. as oral melanin-concentrating hormone
receptor antagonists for treatment of obesity, diabetes, etc.)
RN 897405-96-8 CAPLUS
CN 2-Thiophenecarboxamide, 5-phenyl-N-[3-[3-(1-pyrrolidinylmethyl)phenoxy]propyl]- (9CI) (CA INDEX NAME)



RN 897405-97-9 CAPLUS
CN 2-Thiophenecarboxamide, 5-(4-fluorophenyl)-N-[3-[3-(1-pyrrolidinylmethyl)phenoxy]propyl]- (9CI) (CA INDEX NAME)

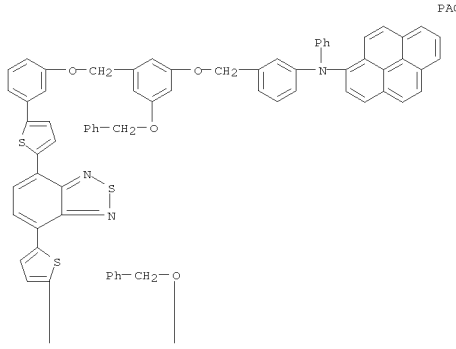
L19 ANSWER 26 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



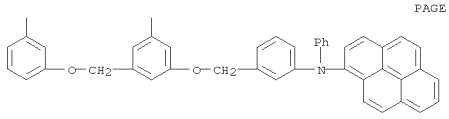
L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:536733 CAPLUS
DOCUMENT NUMBER: 145:189264
TITLE: Dendrimer Analogues of Linear Molecules to Evaluate Energy and Charge-Transfer Properties
AUTHOR(S): Nantalaksakul, Arpornrat; Dasari, Raghunath Reddy; Ahn, Tai-Sang; Al-Kaysi, Rabih; Bardeen, Christopher J.; Thayumanavan, S.
CORPORATE SOURCE: Department of Chemistry, University of Massachusetts, Amherst, MA, 01003, USA
SOURCE: Organic Letters (2006), 8(14), 2981-2984
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:189264
AB We have designed and synthesized difunctionalized polyether dendrimers containing two diarylaminopyrene donors in the periphery and an benzthiadiazole
acceptor at the core to serve as scaffolds for comparison with linear analogs to study the advantage of dendritic scaffolds for energy and charge transfer. Comparison of these dendrimers with the fully decorated dendrimers provides information on the advantage of chromophore d. in energy/charge transfer from periphery to the core.
IT 903562-03-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(G1 dendrimer; preparation of polyether dendrimers and linear analogs to
evaluate energy and charge-transfer properties)
RN 903562-03-8 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



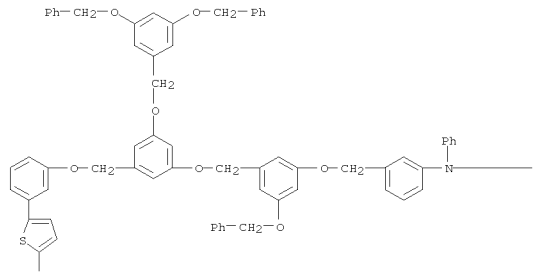
PAGE 2-A



IT 903562-04-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(G2 dendrimer; preparation of polyether dendrimers and linear analogs to
evaluate energy and charge-transfer properties)
RN 903562-04-9 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene[5-[[3,5-bis(phenylmethoxy)phenyl]methoxy]-3,1-phenylene]oxymethylene[5-(phenylmethoxy)-3,1-phenylene]oxymethylene-3,1-phenylene]]bis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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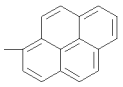
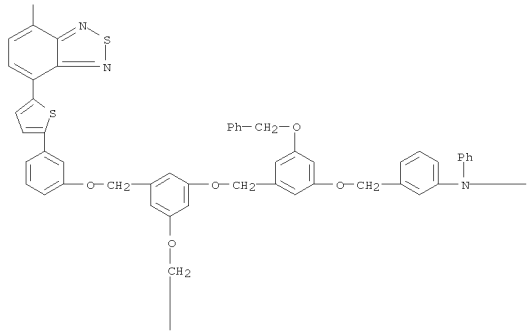
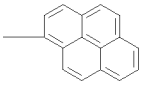


L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

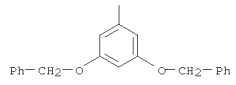


PAGE 2-B



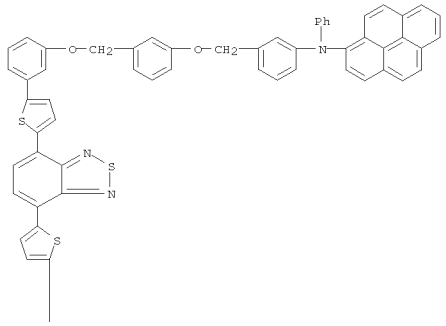
L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-A

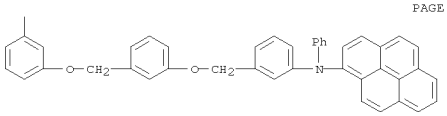


IT 903562-05-0P 903562-06-1P 903562-07-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(linear analog; preparation of polyether dendrimers and linear analogs to
evaluate energy and charge-transfer properties)
RN 903562-05-0 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

PAGE 1-A



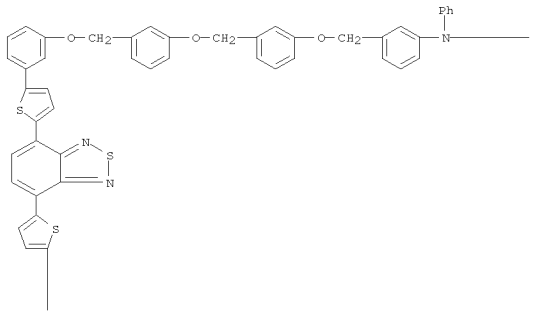
PAGE 2-A



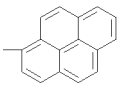
L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 903562-06-1 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

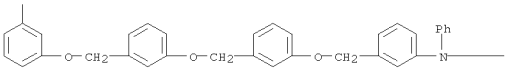
PAGE 1-A



PAGE 1-B

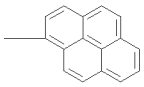


PAGE 2-A



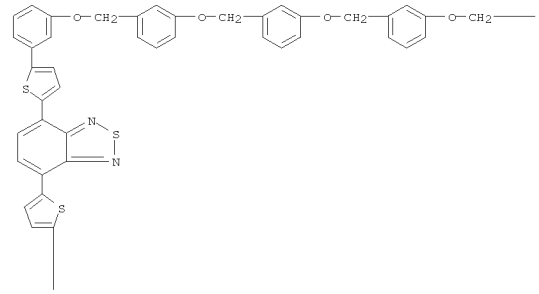
L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B

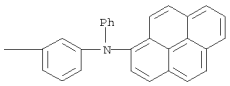


RN 903562-07-2 CAPLUS
CN 1-Pyrenamine, N,N'-[2,1,3-benzothiadiazole-4,7-diylbis(5,2-thiophenediyl-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenyleneoxymethylene-3,1-phenylene)]bis[N-phenyl- (CA INDEX NAME)

PAGE 1-A

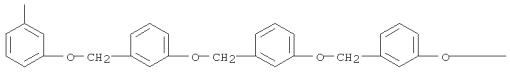


PAGE 1-B

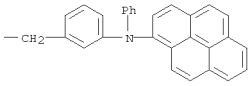


L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



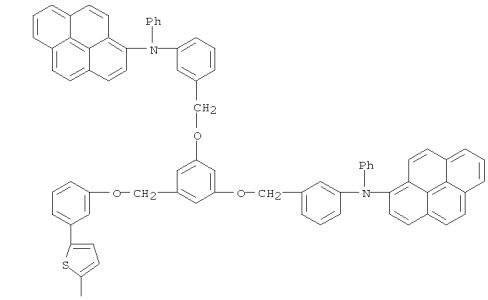
PAGE 2-B



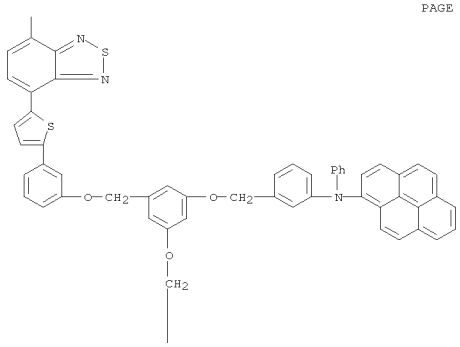
IT 840531-18-2
RL: PRP (Properties)
(preparation of polyether dendrimers and linear analogs to evaluate energy
and charge-transfer properties)
RN 840531-18-2 CAPLUS
CN 1-Pyrenamine, N,N',N'',N'''-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene-5,1,3-benzenetriylbis(oxymethylene-3,1-phenylene)]]tetrakis[N-phenyl- (CA INDEX NAME)

L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

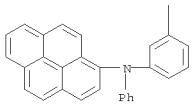


PAGE 2-A



L19 ANSWER 27 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-A



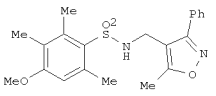
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 28 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:410178 CAPLUS
DOCUMENT NUMBER: 144:450697
TITLE: Preparation of novel sulfonamide derivatives as glucocorticoid receptor modulators for the treatment of inflammatory diseases
INVENTOR(S): Bladh, Haakan; Henriksson, Krister; Hulikal, Vijaykumar; Lepistoe, Matti
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006046914 | A1 | 20060504 | WO 2005-SE1608 | 20051026 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005300148 | A1 | 20060504 | AU 2005-300148 | 20051026 |
| CA 2584409 | A1 | 20060504 | CA 2005-2584409 | 20051026 |
| EP 1807405 | A1 | 20070718 | EP 2005-797057 | 20051026 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU | | | | |

PRIORITY APPLN. INFO.: SE 2004-2635 A 20041029
WO 2005-SE1608 W 20051026

OTHER SOURCE(S): CASREACT 144:450697; MARPAT 144:450697
GI

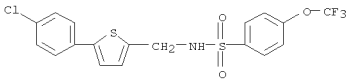


II

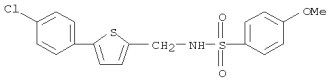
AB The title compds. R3L3S(O2)N(R1)L1WL2R2 [I; R3 = (un)substituted Ph, thienyl, furyl or pyrazolyl; L3 = a bond or CH2; R1 = H, alkyl; W = (un)substituted Ph, isoxazolyl or pyrazolyl, cyclohexyl, or acenaphthene ring; L1 = a bond, CH2; L2 = a bond, O, NH, (CH2)n or CH2NH; n = 1-2; R2 = (un)substituted cyclohexyl, Ph, methylenedioxyphenyl, etc.], useful in medical therapy (for example modulating the glucocorticoid receptor in a warm blooded animal), were prepd. Thus, reacting 4-methoxy-2,3,6-trimethylbenzenesulfonyl chloride with [(5-methyl-3-phenylisoxazol-4-yl)methyl]amine afforded 20% II which showed IC50 of 14 nM against human glucocorticoid receptor binding. Pharmaceutical compn. comprising compd. I is disclosed.

IT 886038-71-7P 886038-88-6P 886038-92-2P
886038-93-3P 886038-94-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel sulfonamide derivs. as glucocorticoid receptor modulators for the treatment of inflammatory diseases)

RN 886038-71-7 CAPLUS
CN Benzenesulfonamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)

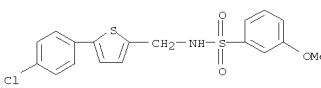


RN 886038-88-6 CAPLUS
CN Benzenesulfonamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-4-methoxy- (9CI) (CA INDEX NAME)

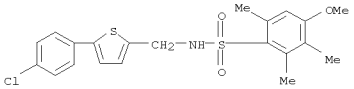


RN 886038-92-2 CAPLUS
CN Benzenesulfonamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-3-methoxy- (9CI) (CA INDEX NAME)

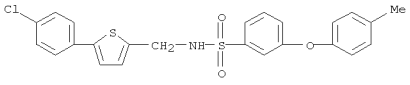
L19 ANSWER 28 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 886038-93-3 CAPLUS
CN Benzenesulfonamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-4-methoxy-2,3,6-trimethyl- (9CI) (CA INDEX NAME)



RN 886038-94-4 CAPLUS
CN Benzenesulfonamide, N-[[5-(4-chlorophenyl)-2-thienyl]methyl]-3-(4-methylphenoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

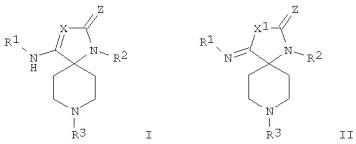
L19 ANSWER 29 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:383818 CAPLUS
DOCUMENT NUMBER: 144:432808
TITLE: Preparation of spiropiperidine compounds as β-secretase inhibitors for the treatment of Alzheimer's disease
INVENTOR(S): Barrow, James C.; Coburn, Craig A.; Egbertson, Melissa S.; McGaughey, Georgia B.; McWherter, Melody A.; Neilson, Lou Anne; Selnick, Harold G.; Stauffer, Shaun R.; Yang, Zhi-Qiang; Yang, Wenjin; Lu, Wanli; Fahr, Bruce; Rittle, Kenneth E.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Sunesis Pharmaceuticals, Inc.
SOURCE: PCT Int. Appl., 182 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006044497 | A2 | 20060427 | WO 2005-US36752 | 20051012 |
| WO 2006044497 | A3 | 20060908 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005295814 | A1 | 20060427 | AU 2005-295814 | 20051012 |
| CA 2583342 | A1 | 20060427 | CA 2005-2583342 | 20051012 |
| EP 1804794 | A2 | 20070711 | EP 2005-812233 | 20051012 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |
| US 2007197571 | A1 | 20070823 | US 2007-663388 | 20070321 |

PRIORITY APPLN. INFO.: US 2004-618420P P 20041013
US 2005-US36752 W 20051012

OTHER SOURCE(S): MARPAT 144:432808
GI

L19 ANSWER 29 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



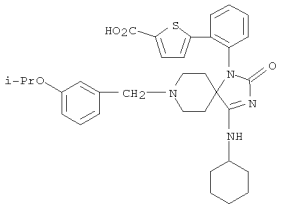
I II

AB The title compds. I or its tautomer II [X = CR5, N; X1 = CR5H or NH; Z = O or S; R1 = H, alkyl, alkylaryl, etc.; R2 = H, alkyl, alkyl-carbocyclyl, etc.; R3 = H, alkylaryl, alkylheteroaryl, etc.] which are inhibitors of the β-secretase enzyme and that are useful in the treatment of diseases in which the β-secretase enzyme is involved, such as Alzheimer's disease, were prepared Thus, reacting N-benzylpiperidinone with benzyl isocyanide in MeOH followed by addition of KOCN in H2O and aniline.HCl afforded I [X = N; Z = O; R1, R3 = CH2Ph; R2 = Ph]. The exemplified compds. I had activity in inhibiting the β-secretase, generally with an IC50 from about 1 nM to 500 μM, preferably 1 nM to 100 μM. The invention is also directed to pharmaceutical compns. comprising the compds. I and the use of these compds. and compns. in the treatment of such diseases in which the β-secretase enzyme is involved.

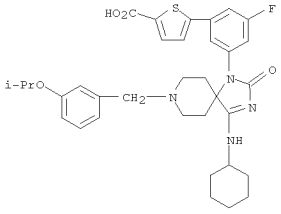
IT 885115-07-1P 885115-33-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of spiropiperidine compds. as β-secretase inhibitors for treating Alzheimer's disease)

RN 885115-07-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[2-[4-(cyclohexylamino)-8-[[3-(1-methylethoxy)phenyl]methyl]-2-oxo-1,3,8-triazaspiro[4.5]dec-3-en-1-yl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 29 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 885115-33-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[3-[4-(cyclohexylamino)-8-[[3-(1-methylethoxy)phenyl]methyl]-2-oxo-1,3,8-triazaspiro[4.5]dec-3-en-1-yl]-5-fluorophenyl]- (9CI) (CA INDEX NAME)



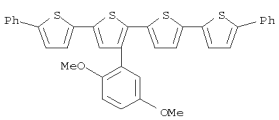
L19 ANSWER 30 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:283605 CAPLUS
DOCUMENT NUMBER: 144:489035
TITLE: Synthesis of Homopolymer Containing Diphenyl End-Capped Oligothiophene Co-oligomer Unit in the Side Chain
AUTHOR(S): Zhao, Chunchang; Zhang, Yong; Wang, Chengwei; Rothberg, Lewis; Ng, Man-Kit
CORPORATE SOURCE: Department of Chemistry and Department of Chemical Engineering, University of Rochester, Rochester, NY, 14627, USA
SOURCE: Organic Letters (2006), 8(8), 1585-1588
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:489035

AB A new polymer with the di-Ph end-capped oligothiophene co-oligomer unit in the side chain was obtained by the ROMP method. The polymer showed good photophys. characteristics, thermal stability, and film-forming properties. A photovoltaic cell fabricated from this polymer showed relatively large open-circuit voltage (VOC = 0.7 V), moderate short-circuit current (ISC = 0.7 μA/cm2), and excellent device stability under ambient conditions.

IT 887256-75-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate in monomer preparation; synthesis of homopolymer containing di-Ph end-capped oligothiophene co-oligomer unit in side chain)

RN 887256-75-9 CAPLUS
CN 2,2':5',2'':5'',2'''-Quaterthiophene, 3''-(2,5-dimethoxyphenyl)-5,5'''-diphenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

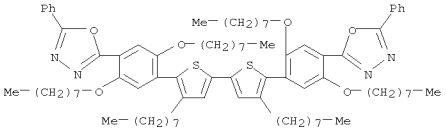
L19 ANSWER 31 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2006:274271 CAPLUS
DOCUMENT NUMBER: 144:489197
TITLE: New p-n diblock and triblock oligomers: effective tuning of HOMO/LUMO energy levels
AUTHOR(S): Wan, Jun-Hua; Feng, Jia-Chun; Wen, Gui-An; Wang, Hong-Yu; Fan, Qu-Li; Wei, Wei; Huang, Chun-Hui; Huang, Wei
CORPORATE SOURCE: Institute of Advanced Materials (IAM), Fudan University, Shanghai, 200433, Peop. Rep. China
SOURCE: Tetrahedron Letters (2006), 47(16), 2829-2833
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:489197

AB A series of oligomers consisting of thiophene as p-type unit and oxadiazole as n-type unit were synthesized, and their photophys. and electrochem. properties were evaluated. Cyclic voltammetry studies demonstrated that the electronic properties of the p-n diblock oligomers could be modulated by changing the number of thiophene and oxadiazole rings. The mol. regiochem. effect to the electrochem. and optical properties was also studied.

IT 885481-72-1P
RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation) (OT2O; p-n diblock and triblock thiophene-oxadiazole oligomers with effective tuning of HOMO/LUMO energy levels)

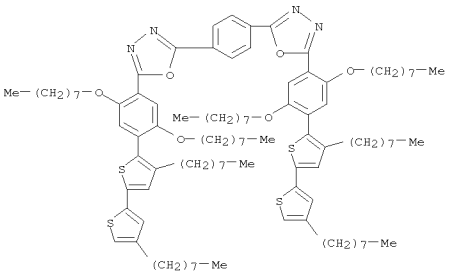
RN 885481-72-1 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-[(4,4'-dioctyl[2,2'-bithiophene]-5,5'-diyl)bis[2,5-bis(octyloxy)-4,1-phenylene]]bis[5-phenyl- (9CI) (CA INDEX NAME)



IT 885481-73-2P
RL: PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation) (T2O2T2; p-n diblock and triblock thiophene-oxadiazole oligomers with effective tuning of HOMO/LUMO energy levels)

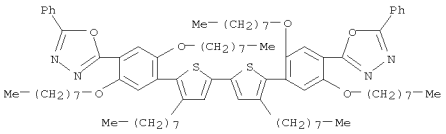
RN 885481-73-2 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-(1,4-phenylene)bis[5-[4-(4,4'-dioctyl[2,2'-bithiophen]-5-yl)-2,5-bis(octyloxy)phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 31 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



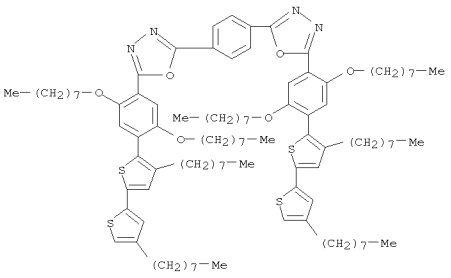
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 32 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:207132 CAPLUS
DOCUMENT NUMBER: 144:451030
TITLE: Effective Tuning of HOMO and LUMO Energy Levels by p-n
Diblock and Triblock Oligomer Approaches
AUTHOR(S): Wan, Jun-Hua; Feng, Jia-Chun; Wen, Gui-An; Wei, Wei; Fan, Qu-Li; Wang, Chuan-Ming; Wang, Hong-Yu; Zhu, Rui;
Yuan, Xiang-Dong; Huang, Chun-Hui; Huang, Wei
CORPORATE SOURCE: Institute of Advanced Materials (IAM), Fudan University, Shanghai, 200433, Peop. Rep. China
SOURCE: Journal of Organic Chemistry (2006), 71(7), 2565-2571
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:451030
AB A series of oligomers consisting of thiophene as p-type unit and oxadiazole as n-type unit were synthesized. On the basis of the characterization of photophys. and electrochem. properties, the structure-property relationships of the oligomers were studied. Cyclic voltammogram studies showed that changing the number of thiophene and oxadiazole units could effectively modulate the electronic properties of the p-n diblock and triblock oligomers. The effect of mol. regiochem. on electronic properties is also studied. The observed electronic properties
were consistent with theor. calcns. These systems demonstrated the band gap control principle in p-n heterostructure oligomers.
IT 885481-72-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(OT2O oligomer; preparation of thiophene and oxadiazole monomers and coupling to obtain p-n oligomers with effective tuning of HOMO and LUMO
energy levels)
RN 885481-72-1 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-[(4,4'-dioctyl[2,2'-bithiophene]-5,5'-diyl)bis[2,5-bis(octyloxy)-4,1-phenylene]]bis[5-phenyl- (9CI) (CA INDEX NAME)



IT 885481-73-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(T2O2T2 oligomer; preparation of thiophene and oxadiazole monomers and

L19 ANSWER 32 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
coupling to obtain p-n oligomers with effective tuning of HOMO and LUMO
energy levels)
RN 885481-73-2 CAPLUS
CN 1,3,4-Oxadiazole, 2,2'-(1,4-phenylene)bis[5-[4-(4,4'-dioctyl[2,2'-bithiophen]-5-yl)-2,5-bis(octyloxy)phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:101303 CAPLUS
DOCUMENT NUMBER: 144:192279
TITLE: Piperazine derivatives and their preparation, pharmaceutical compositions, and agonistic activity of
growth hormone secretagogue (GHS) receptors for the treatment of gastrointestinal disorders
INVENTOR(S): Gaiba, Alessandra; King, Nigel Paul; Takle, Andrew Kenneth; Witherington, Jason
PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 171 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2006010629 | A2 | 20060202 | WO 2005-EP8263 | 20050726 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| AU 2005266448 | A1 | 20060202 | AU 2005-266448 | 20050726 |
| CA 2575359 | A1 | 20060202 | CA 2005-2575359 | 20050726 |
| EP 1778679 | A1 | 20070502 | EP 2005-763645 | 20050726 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR | | | | |
| IN 2007DN00370 | A | 20070803 | IN 2007-DN370 | 20070115 |
| NO 2007001138 | A | 20070228 | NO 2007-1138 | 20070228 |

PRIORITY APPLN. INFO.: GB 2004-16844 A 20040728
GB 2005-14029 A 20050708
WO 2005-EP8263 W 20050726

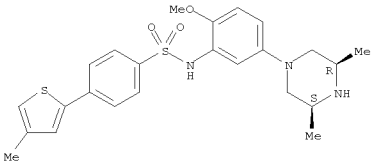
OTHER SOURCE(S): CASREACT 144:192279; MARPAT 144:192279
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

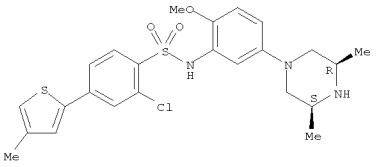
AB The invention provides compds. of formulas I and II or pharmaceutically acceptable salts thereof are as defined in the specification. Compds. for
formulas I and II wherein Y is a single bond, CH2, CH2CH2, or CH=CH; R1 is

L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(hetero)aryl, R2 is H, or C1-6alkyl; R3 is H or Me; R4 is C1-6 alkyl; R5 is H, C1-6alkyl, C3-6cycloalkyl, COC1-6alkyl, C1-6alkoxy, halo, OH, CF3, OCF3, or CN; R6 is H, C1-6alkyl, C3-6cycloalkyl, COC1-6alkyl, C1-6alkoxy, C1-6alkoxy-C1-6alkyl, halo, OH, CF3, OCF3, or CN; or pharmaceutically acceptable salts thereof are claimed in this invention. The compds. are partial or full agonists at the growth hormone secretagogue (GHS) receptors, which may be useful for the treatment of gastrointestinal disorders. Pharmaceutical compns. comprising the compds., methods of prepg. the compds., uses of the compds. and methods involving the compds. are also provided. Example compd. III was prepd. by amination of 2-bromo-4-nitroanisole with cis-2,6-dimethylpiperazine and the resulting [(methoxy)nitrophenyl]dimethylpiperazine underwent hydrogenation to give intermediate IV, which was sulfonylated with 5-(2-pyridinyl)-2-thiophenesulfonyl chloride to give example compd. III. Addnl. 316 example
compds. were prepd. in this invention. All the example compds. were evaluated for their selective agonistic activity at the GHS receptors. All 317 example compds. have an activity of <1 μM in the GHS-R GTPγS functional assays. In the GHS-R agonist BACMAM FLIPR assay, all the example compds. have an EC50 value of <1 μM.
IT 874956-95-3P 874956-96-4P 874956-98-6P
874957-01-4P 874957-03-6P 874957-46-7P
874957-47-8P 874957-49-0P 874957-50-3P
874957-64-9P 874957-65-0P 874957-69-4P
874958-94-8P 874958-97-1P 874958-98-2P
874959-03-2P 874959-04-3P 874959-05-4P
874959-07-6P 874959-16-7P 874959-17-8P
874959-18-9P 874959-19-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of piperazines and their agonistic activity of
growth hormone secretagogue (GHS) receptors for the treatment of gastrointestinal disorders)
RN 874956-95-3 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.

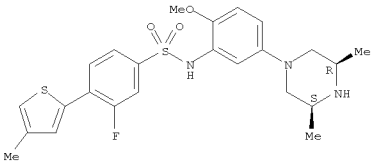


L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



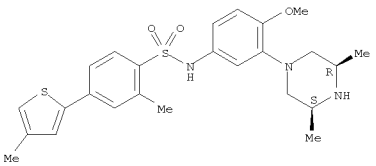
RN 874957-03-6 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-fluoro-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 874957-46-7 CAPLUS
CN Benzenesulfonamide, N-[3-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-4-methoxyphenyl]-2-methyl-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

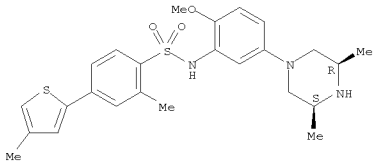
Relative stereochemistry.



RN 874957-47-8 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

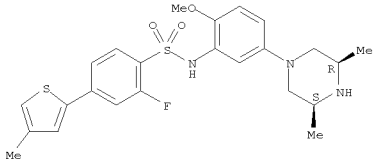
L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 874956-96-4 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-methyl-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 874956-98-6 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-fluoro-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

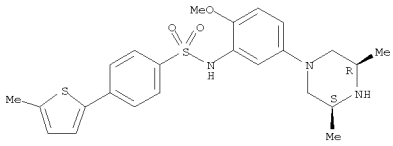
Relative stereochemistry.



RN 874957-01-4 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

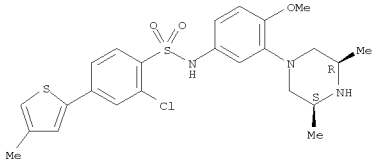
Relative stereochemistry.

L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Relative stereochemistry.



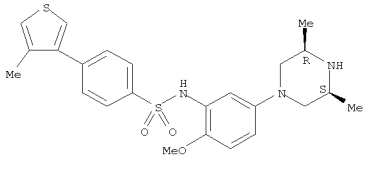
RN 874957-49-0 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[3-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-4-methoxyphenyl]-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 874957-50-3 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(4-methyl-3-thienyl)-, rel- (9CI) (CA INDEX NAME)

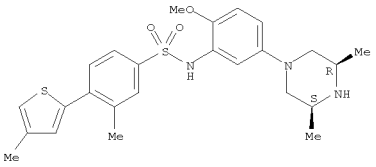
Relative stereochemistry.



RN 874957-64-9 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-methyl-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

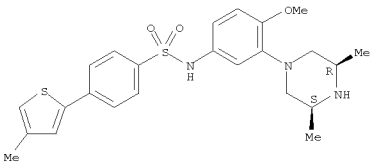
Relative stereochemistry.

L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



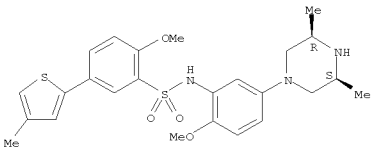
RN 874957-65-0 CAPLUS
CN Benzenesulfonamide, N-[3-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-4-methoxyphenyl]-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



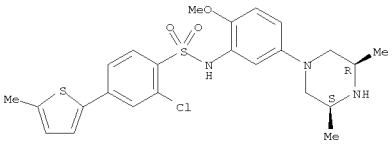
RN 874957-69-4 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-methoxy-5-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



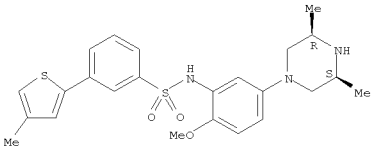
RN 874958-94-8 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



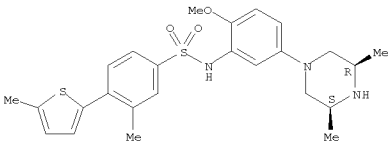
RN 874958-97-1 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



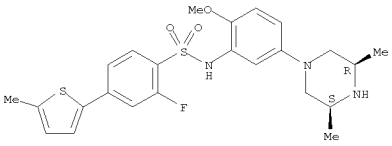
RN 874958-98-2 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-methyl-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



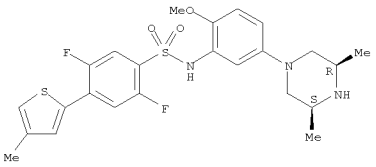
RN 874959-03-2 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-fluoro-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



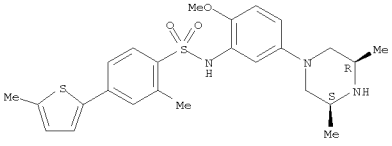
RN 874959-04-3 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2,5-difluoro-4-(4-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



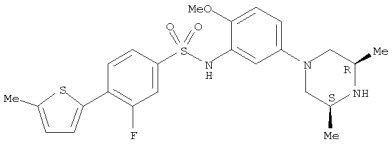
RN 874959-05-4 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-methyl-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



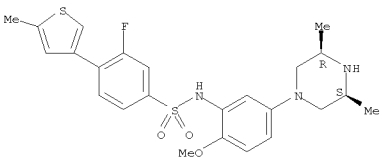
RN 874959-07-6 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-fluoro-4-(5-methyl-2-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



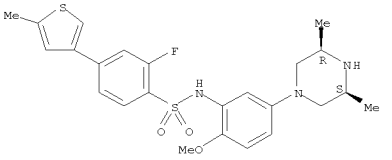
RN 874959-16-7 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-3-fluoro-4-(5-methyl-3-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 874959-17-8 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-2-fluoro-4-(5-methyl-3-thienyl)-, rel- (9CI) (CA INDEX NAME)

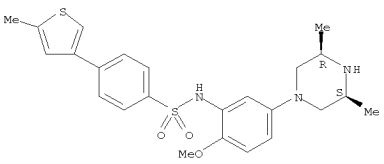
Relative stereochemistry.



L19 ANSWER 33 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

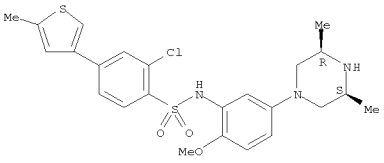
RN 874959-18-9 CAPLUS
CN Benzenesulfonamide, N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(5-methyl-3-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 874959-19-0 CAPLUS
CN Benzenesulfonamide, 2-chloro-N-[5-[(3R,5S)-3,5-dimethyl-1-piperazinyl]-2-methoxyphenyl]-4-(5-methyl-3-thienyl)-, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

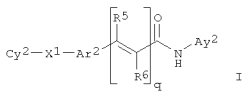
FORMAT

L19 ANSWER 34 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1346218 CAPLUS
DOCUMENT NUMBER: 144:88321
TITLE: Preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase
INVENTOR(S): Delorme, Daniel; Woo, Soon Hyung; Vaisburg, Arkadii; Moradei, Oscar; Leit, Silvana; Raeppel, Stephane; Frechette, Sylvie; Bouchain, Giliane
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 324 pp., Cont.-in-part of U.S. Ser. No. 358,556.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 2005288282 | A1 | 20051229 | US 2005-91025 | | 20050325 |
| US 2004106599 | A1 | 20040603 | US 2002-242304 | | 20020912 |
| US 2004142953 | A1 | 20040722 | US 2003-358556 | | 20030204 |
| US 6897220 | B2 | 20050524 | | | |
| JP 2005255683 | A | 20050922 | JP 2005-80310 | | 20050318 |
| AU 2006252047 | A1 | 20070111 | AU 2006-252047 | | 20061214 |
| PRIORITY APPLN. INFO.: | | | US 2001-322402P | P | 20010914 |
| | | | US 2002-391728P | P | 20020626 |
| | | | US 2002-242304 | A2 | 20020912 |
| | | | US 2003-358556 | A2 | 20030204 |
| | | | AU 2002-327627 | A3 | 20020912 |
| | | | JP 2003-528544 | A3 | 20020912 |

OTHER SOURCE(S): MARPAT 144:88321
GI

L19 ANSWER 34 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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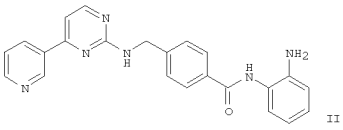


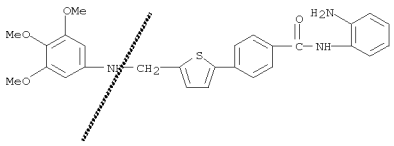
II

AB The invention provides compds. and methods for inhibiting histone deacetylase enzymic activity. Such compds. include carboxamides I [Cy2 = (un)substituted cycloalkyl, aryl, heteroaryl, heterocyclyl (each of which is optionally fused to one or two aryl or heteroaryl rings, or to one or two (un)saturated cycloalkyl or heterocyclic rings); X1 = a bond, M1L2M1, L2M2L2 (wherein L2 = a bond, alkylene, alkenylene, alkynylene; M1 = O, S, SO, NHCO, etc.; M2 = M1, heteroarylene, heterocyclylene); Ar2 = (un)substituted (hetero)arylene; R5, R6 = H, alkyl, aryl, aralkyl; q = 0-1; Ay2 = (un)substituted 5-6 membered cycloalkkyl, heterocyclyl or heteroaryl substituted with an amino or hydroxy molety; with provisos] which were prepared and claimed. E.g., a multi-step synthesis of II, starting from Me 4-(aminomethyl)benzoate.HCl, was given. The invention also provides compns. and methods for treating cell proliferative diseases and conditions. Antineoplastic effects of some I are illustrated for colorectal, pulmonary and pancreatic neoplasms; also the combined antineoplastic effect of histone deacetylase inhibitors and histone deacetylase antisense oligonucleotides on tumor cells in vivo was demonstrated. Although the methods of preparation are not claimed, hundreds of example prepns. are included.

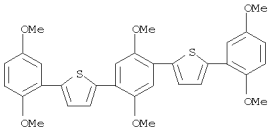
IT 503042-76-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase for treating cell proliferative disorders)

RN 503042-76-0 CAPLUS
CN Benzamide, N-(2-aminophenyl)-4-[5-[[(3,4,5-trimethoxyphenyl)amino]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 34 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

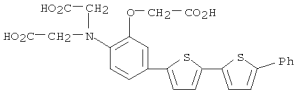


L19 ANSWER 35 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1338260 CAPLUS
DOCUMENT NUMBER: 144:201123
TITLE: Study of [thienylene-dialkoxy phenylene] conjugated materials
AUTHOR(S): Silva, R. A.; Cury, L. A.; Mazzoni, M. S.; Soares, E.; Guimaraes, P. S. S.; Serein-Spirau, F.; Lois, S.; Moreau, J.; Lere-Porte, J.-P.
CORPORATE SOURCE: Faculdade de Fisica, Universidade Federal de Uberlandia, Bloco 1X, Minas Gerais, Brazil
SOURCE: Macromolecular Symposia (2005), 229(Advanced Polymeric Materials), 194-196
CODEN: MSYMEC; ISSN: 1022-1360
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In this work we report on the electrochromic and optical studies of thin films of thienylene-dialkoxyphenylene. The films for the optical measurements were prepared by spin casting on glass and silicon substrates.
Photoluminescence and absorption spectra were recorded in the temperature range
from 300 K. The differences between the spectra of the polymer and the oligomer can be attributed to a higher mean conjugation length in the polymer than in the oligomer. We present also a first principles theor. calcn. which shows that the conjugated oligomer has an HOMO-LUMO energy around 2.0 eV, which is consistent with the exptl. data.
IT 875105-39-8
RL: PRP (Properties)
(thienylene-dialkoxy phenylene conjugated materials)
RN 875105-39-8 CAPLUS
CN Thiophene, 2,2'-(2,5-dimethoxy-1,4-phenylene)bis[5-(2,5-dimethoxyphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

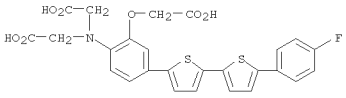
L19 ANSWER 36 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1324614 CAPLUS
DOCUMENT NUMBER: 144:224963
TITLE: Palladium catalyzed synthesis of Ca2+ indicators with aryl bithiophene and terthiophene fluorophores
AUTHOR(S): Boens, Noel; Avcibasi, Nesibe; Samanta, Subhendu S.; Kilonda, Amuri; Hoornaert, Georges J.; Van der Eycken, Erik
CORPORATE SOURCE: Department of Chemistry, Katholieke Universiteit Leuven, Heverlee, 3001, Belg.
SOURCE: Tetrahedron (2006), 62(4), 684-690
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:224963
AB Five new fluorescent indicators for Ca2+ were synthesized using the Stille
reaction. They all consist of the tricarboxylate chelator APTRA (o-aminophenol-N,N,O-triacetic acid) linked to a (substituted) bithiophene
or terthiophene fluorophore. The dissociation consts. Kd measured via fluorometric titrns. at 21° in 100 mM KCl buffered solution, pH 7.05, for the Ca2+ complexes with the new probes are at 10-40 μM.
IT 875582-22-2P 875582-24-4P 875582-25-5P
875582-26-6P
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(calcium determination by fluorometry with fluorescent indicators based on aryl
bithiophene and terthiophene fluorophores and palladium catalyzed synthesis)
RN 875582-22-2 CAPLUS
CN Glycine, N-[2-(carboxymethoxy)-4-(5'-phenyl[2,2'-bithiophen]-5-yl)phenyl]- N-(carboxymethyl)-, tricesium salt (9CI) (CA INDEX NAME)



●3 Cs

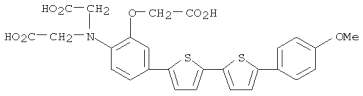
RN 875582-24-4 CAPLUS
CN Glycine, N-[2-(carboxymethoxy)-4-[5'-(4-fluorophenyl)[2,2'-bithiophen]-5-yl]phenyl]-N-(carboxymethyl)-, tricesium salt (9CI) (CA INDEX NAME)





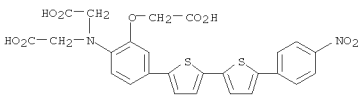
●3 Cs

RN 875582-25-5 CAPLUS
CN Glycine, N-[2-(carboxymethoxy)-4-[5'-(4-methoxyphenyl)[2,2'-bithiophen]-5-yl]phenyl]-N-(carboxymethyl)-, tricesium salt (9CI) (CA INDEX NAME)



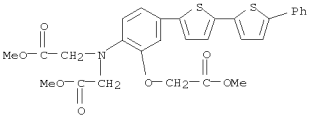
●3 Cs

RN 875582-26-6 CAPLUS
CN Glycine, N-[2-(carboxymethoxy)-4-[5'-(4-nitrophenyl)[2,2'-bithiophen]-5-yl]phenyl]-N-(carboxymethyl)-, tricesium salt (9CI) (CA INDEX NAME)

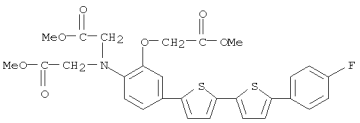


●3 Cs

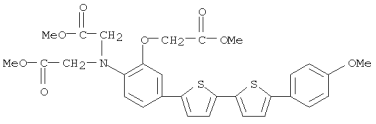
IT 875582-28-8P 875582-29-9P 875582-30-2P
875582-31-3P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(calcium determination by fluorometry with fluorescent indicators based on aryl
bithiophene and terthiophene fluorophores and palladium catalyzed synthesis)
RN 875582-28-8 CAPLUS
CN Glycine, N-[2-(2-methoxy-2-oxoethoxy)-4-(5'-phenyl[2,2'-bithiophen]-5-yl)phenyl]-N-(2-methoxy-2-oxoethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 875582-29-9 CAPLUS
CN Glycine, N-[4-[5'-(4-fluorophenyl)[2,2'-bithiophen]-5-yl]-2-(2-methoxy-2-oxoethoxy)phenyl]-N-(2-methoxy-2-oxoethyl)-, methyl ester (9CI) (CA INDEX NAME)

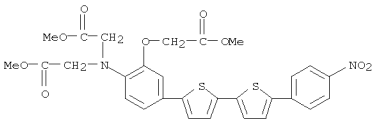


RN 875582-30-2 CAPLUS
CN Glycine, N-[2-(2-methoxy-2-oxoethoxy)-4-[5'-(4-methoxyphenyl)[2,2'-bithiophen]-5-yl]phenyl]-N-(2-methoxy-2-oxoethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 875582-31-3 CAPLUS
CN Glycine, N-[2-(2-methoxy-2-oxoethoxy)-4-[5'-(4-nitrophenyl)[2,2'-bithiophen]-5-yl]phenyl]-N-(2-methoxy-2-oxoethyl)-, methyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 36 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

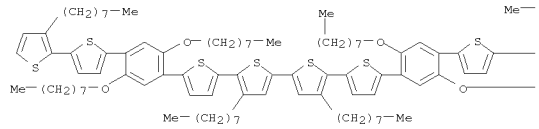
L19 ANSWER 37 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1307935 CAPLUS
DOCUMENT NUMBER: 144:62626
TITLE: Device with small molecular thiophene compound having divalent linkage
INVENTOR(S): Ong, Beng S.; Liu, Ping; Wu, Yiliang
PATENT ASSIGNEE(S): Xerox Corporation, USA
SOURCE: Eur. Pat. Appl., 44 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1605533 | A2 | 20051214 | EP 2005-105046 | 20050609 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU | | | | |
| US 2005277760 | A1 | 20051215 | US 2004-865620 | 20040610 |
| JP 2006036755 | A | 20060209 | JP 2005-163735 | 20050603 |
| PRIORITY APPLN. INFO.: | | | US 2004-865620 A | 20040610 |

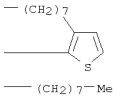
OTHER SOURCE(S): MARPAT 144:62626
AB An electronic device composed of a semiconductor layer in contact with a number of electrodes, wherein the semiconductor layer includes a small mol. thiophene compound consisting of: at least one divalent linkage; and a plurality of thiophene units, each thiophene unit being represented by structure (A) wherein each thiophene unit is bonded at either or both of the 2nd ring position and the 5th ring position, wherein there is at least one thiophene unit where R1 is present at the 3rd ring position or the 4th ring position, or at both the 3rd ring position and the 4th ring position, wherein for any two adjacent thiophene units there is excluded the simultaneous presence of the same or different R1 at the 3-position of one thiophene unit and at the 3'-position of the other thiophene unit, and wherein the number of the thiophene units is at least 6.
IT 871334-40-6P
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electronic device with small mol. thiophene semiconductor compound having divalent linkage)
RN 871334-40-6 CAPLUS
CN 2,2':5',2'':5'',2'''-Quaterthiophene, 5,5'''-bis[2,5-bis(octyloxy)-4-(3'-octyl[2,2'-bithiophen]-5-yl)phenyl]-3',4''-dioctyl- (9CI) (CA INDEX NAME)

L19 ANSWER 37 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

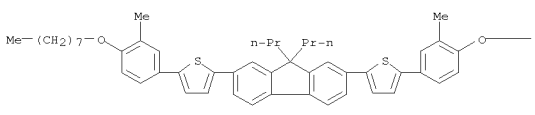


PAGE 1-B



L19 ANSWER 38 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1284489 CAPLUS
DOCUMENT NUMBER: 145:18139
TITLE: Synthesis and mesomorphic behaviour of novel light-emitting liquid crystals
AUTHOR(S): Aldred, Matthew P.; Eastwood, Amanda J.; Kitney, Stuart P.; Richards, Gary J.; Vlachos, Panos; Kelly, Stephen M.; O'Neill, Mary
CORPORATE SOURCE: Department of Chemistry, University of Hull, Hull, HU6 7RX, UK
SOURCE: Liquid Crystals (2005), 32(10), 1251-1264
CODEN: LICRE6; ISSN: 0267-8292
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The results of a systematic study of the structure-mesomorphic behavior relations of a diverse range of light-emitting liquid crystals, but especially nematic 2,7-disubstituted-9,9-dialkylfluorenes, are reported. The dependence of the mesomorphic behavior and transition temps. on the nature and length of the terminal chains, the nature, position and number of lateral substituents and the number and nature of aromatic rings with and without heteroatoms in the central core was studied. The results of these studies were used to design polymerizable, light-emitting crystals (reactive mesogens) with a nematic phase having a high clearing point and a m.p. below room temperature for facile OLED fabrication.
IT 888036-08-6P 888036-10-0P 888036-12-2P
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and liquid crystal properties of)
RN 888036-08-6 CAPLUS
CN Thiophene, 2,2'-(9,9-dipropyl-9H-fluorene-2,7-diyl)bis[5-[3-methyl-4-(octyloxy)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

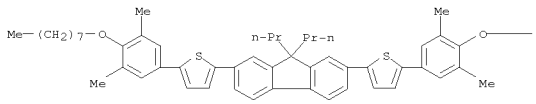


PAGE 1-B

RN 888036-10-0 CAPLUS

L19 ANSWER 38 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Thiophene, 2,2'-(9,9-dipropyl-9H-fluorene-2,7-diyl)bis[5-[3,5-dimethyl-4-(octyloxy)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

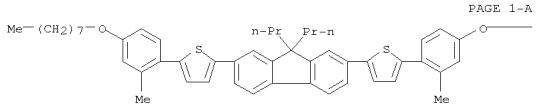


PAGE 1-B

— $(CH_2)_7$ — Me

RN 888036-12-2 CAPLUS
CN Thiophene, 2,2'-(9,9-dipropyl-9H-fluorene-2,7-diyl)bis[5-[2-methyl-4-(octyloxy)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

— $(CH_2)_7$ — Me

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 39 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1132895 CAPLUS
DOCUMENT NUMBER: 143:387313
TITLE: Preparation of glycosides as antidiabetic agents and having inhibitory activity against sodium-dependent transporter
INVENTOR(S): Nomura, Sumihiro; Kawanishi, Eiji; Ueta, Kiichiro
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 123 pp., Cont.-in-part of Appl. No. PCT/JP04/011312.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2005233988 | A1 | 20051020 | US 2005-45446 | 20050131 |
| WO 2005012326 | A1 | 20050210 | WO 2004-JP11312 | 20040730 |
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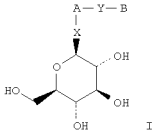
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| WO 2006080577 | A1 | 20060803 | WO 2006-JP301921 | 20060131 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| US 2006217323 | A1 | 20060928 | US 2006-446014 | 20060602 |
| US 2006229260 | A1 | 20061012 | US 2006-453728 | 20060615 |
| US 2006234954 | A1 | 20061019 | US 2006-453727 | 20060615 |
| US 2006293325 | A1 | 20061228 | US 2006-453726 | 20060615 |
| PRIORITY APPLN. INFO.: | | | US 2003-491534P | P 20030801 |
| | | | WO 2004-JP11312 | A2 20040730 |
| | | | US 2003-491523P | P 20030801 |

L19 ANSWER 39 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

| | | |
|---|---|---|
| US 2003-519155P | P | 20031112 |
| US 2003-519209P | P | 20031112 |
| US 2003-519210P | P | 20031112 |
| US 2003-519381P | P | 20031112 |
| US 2004-579722P | P | 20040615 |
| US 2004-579730P | P | 20040615 |
| US 2004-579758P | P | 20040615 |
| US 2004-579792P | P | 20040615 |
| US 2004-903034 | A3 | 20040730 |
| US 2004-903136 | A3 | 20040730 |
| US 2004-903233 | A3 | 20040730 |
| US 2004-903234 | A3 | 20040730 |
| JP 2005-23728 | A | 20050131 |
| US 2005-45446 | A | 20050131 |
| US 2005-726653P | P | 20051017 |

OTHER SOURCE(S): CASREACT 143:387313; MARPAT 143:387313
GI

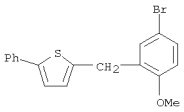


I

AB Glycosides I, wherein A and B are: (1) A is unsatd. monocyclic heterocyclic, and B is unsatd. monocyclic heterocyclic, unsatd. fused hetero-bicyclic, or benzene, (2) A is benzene, and B is unsatd. monocyclic heterocyclic or unsatd. fused hetero-bicyclic, or (3) A is unsatd. fused hetero-bicyclic, and B are independently unsatd. monocyclic heterocyclic, unsatd. fused hetero-bicyclic, or benzene; X is a carbon atom or a nitrogen atom; Y is -(CH2)n- (n is 1 or 2); a pharmaceutically acceptable salt thereof, or a prodrug thereof. A method is claimed for treating or delaying the progression or onset of diabetes mellitus, diabetic retinopathy, diabetic neuropathy, diabetic nephropathy, delayed wound healing, insulin resistance, hyperglycemia, hyper-insulinemia, elevated blood levels of fatty acids, elevated blood levels of glycerol, hyperlipidemia, obesity, hypertriglyceridemia, Syndrome X, diabetic complications, atherosclerosis, or hypertension. The pharmaceutical compns. may be orally administered to mammalian species including human beings, apes, dogs, etc., for example, in the dosage form of tablet, capsule, granule or powder, or administered in the form of injection prepn., or intra-nasally, or in the form of transdermal patch. Thus, 1-(β-D-glucopyranosyl)-4-chloro-3-(6-ethyl-benzo[b]thiophen-2-yl-methyl)benzene was prepd. as antidiabetic agent and having inhibitory activity against sodium-dependent transporter.

IT 842135-51-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of glycosides as antidiabetic agents and having inhibitory activity against sodium-dependant transporter)

RN 842135-51-7 CAPLUS
CN Thiophene, 2-[(5-bromo-2-methoxyphenyl)methyl]-5-phenyl- (9CI) (CA INDEX NAME)



L19 ANSWER 40 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1103743 CAPLUS
DOCUMENT NUMBER: 143:387061
TITLE: Preparation of alkoxyphenylpropanoic acid derivatives as GPR40 receptor function regulators
INVENTOR(S): Yasuma, Tsuneo; Kitamura, Shuji; Sakai, Nozomu
PATENT ASSIGNEE(S): Takeda Pharmaceutical Company Limited, Japan
SOURCE: PCT Int. Appl., 169 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005095338 | A1 | 20051013 | WO 2005-JP6522 | 20050328 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

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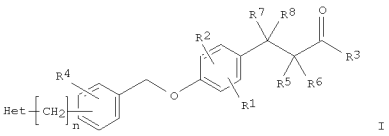
| EP 1731505 | A1 | 20061213 | EP 2005-727536 | 20050328 |

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

PRIORITY APPLN. INFO.: JP 2004-101149 A 20040330
WO 2005-JP6522 W 20050328
OTHER SOURCE(S): MARPAT 143:387061
GI

L19 ANSWER 40 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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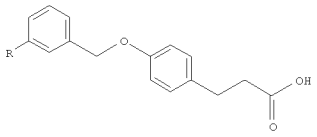
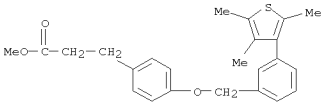


II

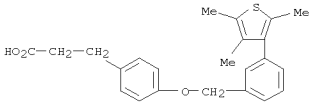
AB Title compds. I [Het = (un)substituted heterocycle; n = 0, 1; R1, R2 = H, alkyl, halo; R3 = (un)substituted hydroxy, (un)substituted amino; R4 = H, (un)substituted hydrocarbon, (un)substituted hydroxy, etc.; R5, R6 = H, alkyl, halo; R7, R8 = H, alkyl, halo, etc.] were prepared For example, 1,1'-(azodicarbonyl)dipiperidine mediated alkylation of 3-(4-hydroxyphenyl)propanoic acid Me ester with [3-(1,3,5-trimethyl-1H-pyrazol-4-yl)phenyl]methanol, e.g., prepared from 4-bromo-1,3,5-trimethyl-1H-pyrazole in 2 steps, followed by hydrolysis using NaOH afforded compound II [R = 1,3,5-trimethyl-1H-pyrazol-4-yl]. Compound II [R = 2,4,5-trimethyl-3-thienyl] has function regulating effect on GPR40 (G protein-coupled receptor 40) receptor with the EC50 value of <10 nM. Compds. I are claimed useful for the treatment of diabetes. Formulations are given.

IT 866586-16-5P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of alkoxyphenylpropanoic acid derivs. as GPR40 receptor function regulators for treatment of diabetes)
RN 866586-16-5 CAPLUS
CN Benzenepropanoic acid, 4-[[3-(2,4,5-trimethyl-3-thienyl)phenyl]methoxy]-, methyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 40 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



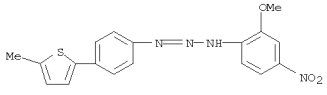
IT 866586-17-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of alkoxyphenylpropanoic acid derivs. as GPR40 receptor function regulators for treatment of diabetes)
RN 866586-17-6 CAPLUS
CN Benzenepropanoic acid, 4-[[3-(2,4,5-trimethyl-3-thienyl)phenyl]methoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 41 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1053070 CAPLUS
DOCUMENT NUMBER: 143:459818
TITLE: 2-Methoxy-4-nitrobenzenediazonium salt as a practical diazonium-transfer agent for primary arylamines via tautomerism of 1,3-diaryltriazenes: Deaminative iodination and arylation of arylamines without direct diazotization
AUTHOR(S): Sueki, Tomoyuki; Son, Eun-Cheol; Tamao, Kohei
CORPORATE SOURCE: International Research Center for Elements Science, Institute for Chemical Research, Kyoto University, Uji, Japan
SOURCE: Bulletin of the Chemical Society of Japan (2005), 78(9), 1654-1658
CODEN: BCSJA8; ISSN: 0009-2673
PUBLISHER: Chemical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:459818
AB 1,3-Diaryltriazenes, prepared from a 2-methoxy-4-nitrobenzenediazonium salt and primary arylamines, exist as azo-transfer tautomers in which the 2-methoxy-4-nitrophenyl group is present on the saturated nitrogen atom and forms a hydrogen bond between the 2-methoxy group and the N-H moiety. The synthetic utility of the diazonium salt as a practical diazonium-transfer agent for primary arylamines via tautomerism of the 1,3-diaryltriazenes has been demonstrated by the deaminative iodination and arylation of the arylamines without direct diazotization. The starting 2-methoxy-4-nitrophenylamine can be easily recovered after the reactions.

IT 869373-83-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(2-methoxy-4-nitrobenzenediazonium salt as a practical diazonium-transfer agent for primary arylamines in deaminative iodination and arylation)
RN 869373-83-1 CAPLUS
CN 1-Triazene, 1-(2-methoxy-4-nitrophenyl)-3-[4-(5-methyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



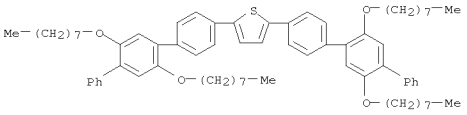
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 42 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1039645 CAPLUS
DOCUMENT NUMBER: 144:7175
TITLE: Monodisperse Aromatic Oligomers of Defined Structure and Large Size through Selective and Sequential Suzuki Palladium-Catalyzed Cross-Coupling Reactions
AUTHOR(S): Lightowler, Stephen; Hird, Michael
CORPORATE SOURCE: Department of Chemistry, University of Hull, Hull, HU6 7RX, UK
SOURCE: Chemistry of Materials (2005), 17(22), 5538-5549 CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

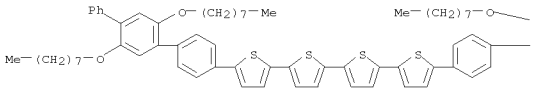
AB Several monodisperse aromatic oligomers of defined structure have been prepared through selective and sequential palladium-catalyzed cross-coupling reactions. The scope of the synthesis was evaluated in terms of (i) mol. size with materials ranging from relatively small sizes (5 and 6 aromatic rings) through to intermediate sizes (9 and 10 aromatic rings), right up to a monodisperse oligomer with 21 aromatic rings, and (ii) variety of mol. structure, with materials including benzene and thiophene core units, and peripheral substituents, including octyloxy, fluoro, and cyano to aid solubility and enhance polarity. The synthetic strategy involved the preparation of Grignard reagents and organolithium derivs. to generate arylboronic acids, which were then involved in selective Suzuki palladium-catalyzed cross-couplings to generate intermediate bromides. These intermediates were either converted into boronic acids and then used in further couplings or used directly in further couplings. The scope and limitations of the synthetic methodol. are reported in terms of the size and variety of structure.

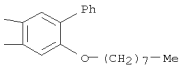
IT 869885-08-5P 869885-09-6P 869885-10-9P
869885-11-0P 869885-13-2P 869885-14-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of monodisperse aromatic oligomers of defined structure)

RN 869885-08-5 CAPLUS
CN Thiophene, 2,5-bis[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4-yl]- (9CI)
(CA INDEX NAME)

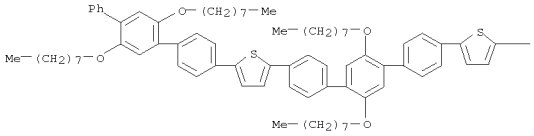


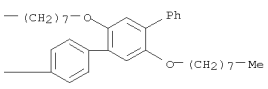
L19 ANSWER 42 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)





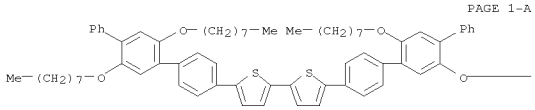
RN 869885-13-2 CAPLUS
CN Thiophene, 2,2'-[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4,4''-diyl]bis[5-[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4-yl]- (9CI) (CA INDEX NAME)

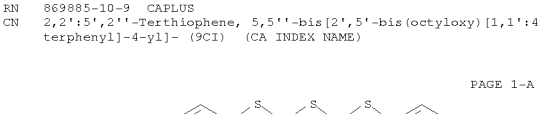




RN 869885-14-3 CAPLUS
CN [2,2':5',2''-Terthiophene]-5-carbonitrile, 5'',5'''''-[2',5'-bis(octyloxy)[1,1':4',1'''-terphenyl]-4,4''-diyl]bis- (9CI) (CA INDEX NAME)

L19 ANSWER 42 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



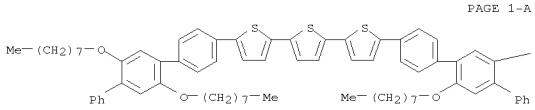


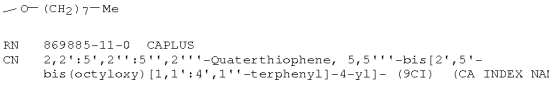
RN 869885-09-6 CAPLUS
CN 2,2'-Bithiophene, 5,5'-bis[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4-yl]- (9CI) (CA INDEX NAME)





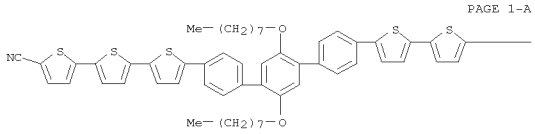
RN 869885-10-9 CAPLUS
CN 2,2':5',2''-Terthiophene, 5,5''-bis[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4-yl]- (9CI) (CA INDEX NAME)





RN 869885-11-0 CAPLUS
CN 2,2':5',2'':5'',2'''-Quaterthiophene, 5,5'''-bis[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4-yl]- (9CI) (CA INDEX NAME)

L19 ANSWER 42 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 43 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:1028945 CAPLUS
DOCUMENT NUMBER: 145:134075
TITLE: Photonic applications of glassy liquid crystals
AUTHOR(S): Chen, Huang-Ming P.; Kumar, K. G. Pani; Lin, Chi-Wen; Kim, Chun K.; Chen, Shaw H.
CORPORATE SOURCE: Department of Photonics and Display Institute, National Chiao Tung Univ., Taichung, Peop. Rep. China
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (2005), 5872(Advancements in Polymer Optics Design, Fabrication, and Materials), 587204/1-587204/8
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English

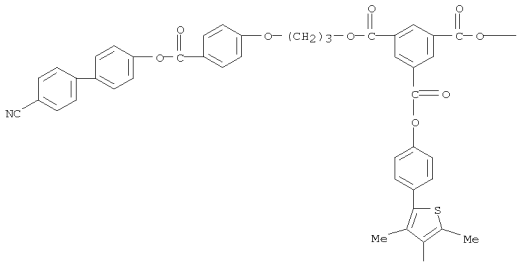
AB Glassy liquid crystals (GLCs) possessing multi-functionalities, excellent morphol. stability, and elevated phase transition temperature have been designed and synthesized for photonic device applications. Recent development has been reported on deterministic synthesis approach for scalable process in preparing GLC materials. The advanced processing eases the material preparation and tailors the material properties accordingly to suit device applications. These applications can be found in: (1) chiral nematic GLCs for circularly polarizers and notch filters, (2) photochromic nematic GLC, which can be photomodulated reflective indexes in the solid states, for potential applications in nondestructive rewritable optical data storages and photonic switching, and (3) ferroelec. GLCs for potential fast switching light valves.

IT 611206-46-3
RL: TEM (Technical or engineered material use); USES (Uses)
(photonic applications of glassy liquid crystals)

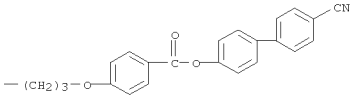
RN 611206-46-3 CAPLUS
CN 1,3,5-Benzenetricarboxylic acid, (3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[(3,5-dimethyl-4,2-thiophenediyl)-4,1-phenylene] tetrakis[3-[4-[[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]carbonyl]phenoxy]propyl] ester (9CI) (CA INDEX NAME)

L19 ANSWER 43 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

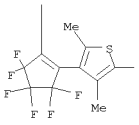
PAGE 1-A



PAGE 1-B

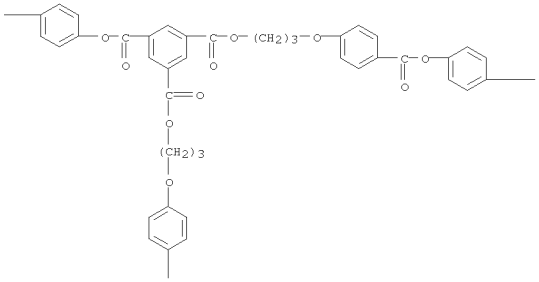


PAGE 2-A

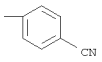


L19 ANSWER 43 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B

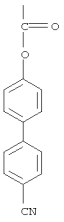


PAGE 2-C



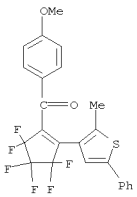
L19 ANSWER 43 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-B



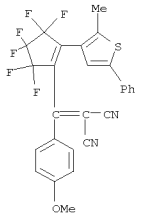
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 44 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1027400 CAPLUS
DOCUMENT NUMBER: 143:469439
TITLE: A photoswitchable donor-π-linker-acceptor system based on a modified hexatriene backbone
AUTHOR(S): Wustenberg, Bettina; Branda, Neil R.
CORPORATE SOURCE: Department of Chemistry, Simon Fraser University, Burnaby, BC, V5A 1S6, Can.
SOURCE: Advanced Materials (Weinheim, Germany) (2005), 17(17), 2134-2138
CODEN: ADVMEW; ISSN: 0935-9648
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Photoresponsive hexatrienes, in which a donor-π-linker-acceptor motif can be reversibly created and broken (see Figure), are synthesized using a versatile approach. Photoinduced ring closing forces a reversible change in hybridization of one of the carbons connecting the donor to the acceptor group, resulting in the breaking of the linear π-conjugation. One particular derivative has interesting electronic properties of potential use in optoelectronics.
IT 869207-54-5P 869207-58-9P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(photoswitchable donor-π-linker-acceptor system based on a modified hexatriene backbone)
RN 869207-54-5 CAPLUS
CN Methanone, [3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](4-methoxyphenyl)- (CA INDEX NAME)



RN 869207-58-9 CAPLUS
CN Propanedinitrile, 2-[[3,3,4,4,5,5-hexafluoro-2-(2-methyl-5-phenyl-3-thienyl)-1-cyclopenten-1-yl](4-methoxyphenyl)methylene]- (CA INDEX NAME)

L19 ANSWER 44 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

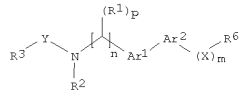
L19 ANSWER 45 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1021624 CAPLUS
DOCUMENT NUMBER: 143:326392
TITLE: Preparation of biaryl amines as M3 muscarinic acetylcholine receptor antagonists
INVENTOR(S): Budzik, Brian W.; Cooper, Anthony W. J.; Corbett, David Francis; Jin, Jian; Laine, Dramane I.; Wang, Yonghui; Moore, Michael Lee; Rivero, Ralph A.; Shi, Dongchuan; Wang, Feng; Xie, Haibo; Zhu, Chongjie
PATENT ASSIGNEE(S): Glaxo Group Limited, UK; et al.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005087236 | A1 | 20050922 | WO 2005-US8302 | 20050311 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1725236 | A1 | 20061129 | EP 2005-725459 | 20050311 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV | | | | |

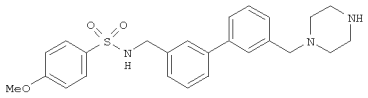
PRIORITY APPLN. INFO.: US 2004-552106P P 20040311
WO 2005-US8302 W 20050311

OTHER SOURCE(S): MARPAT 143:326392
GI

L19 ANSWER 45 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



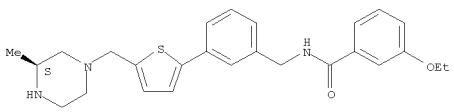
I



II

AB Title compds. I [wherein Ar1, Ar2 = (un)substituted Ph or monocyclic heteroaryl; R6 = (un)substituted amine; X = C(R1)p when m = 0-3; X = CO when m = 1; p = 0-2; n = 0-3; Y = CO, SO, SO2, HNC(O) or OC(O); R1, R2 = H, (un)substituted alkyl, etc.; R3 = (un)substituted (hetero)aryl, etc., or pharmaceutically acceptable salts thereof] were prepared as M3 muscarinic acetylcholine receptor antagonists. For instance, solid-phase synthesis of II·2CF3COOH was realized in an overall yield of 46% on 2,6-dimethoxy-4-polystyrenebenzyloxybenzaldehyde (DMHB resin), via (1) reductive amination with 3-bromobenzylamine hydrochloride; (2) N-sulfonation with 4-methoxybenzenesulfonyl chloride; (3) Pd-catalyzed coupling with 3-formylphenylboronic acid; (4) reductive amination with N-Bocpiperazine; and (5) cleavage from the resin with TFA. No biol. data were given. I and pharmaceutical compns. are potentially useful for the treatment of muscarinic acetylcholine receptor-mediated diseases, such as respiratory tract disorders.
IT 865312-57-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(antagonist; preparation of biaryl amines as M3 muscarinic acetylcholine receptor antagonists)
RN 865312-57-8 CAPLUS
CN Benzamide, 3-ethoxy-N-[[3-[5-[[(3S)-3-methyl-1-piperazinyl]methyl]-2-thienyl]phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

L19 ANSWER 45 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

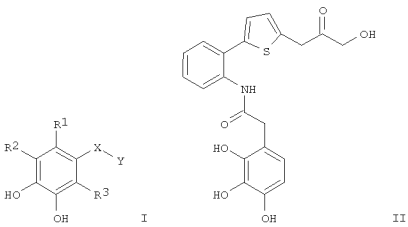
L19 ANSWER 46 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:1020451 CAPLUS
DOCUMENT NUMBER: 143:305710
TITLE: Non-glycosylated/-glycosidic/-peptidic small molecule selectin inhibitors for the treatment of inflammatory disorders
INVENTOR(S): Kranich, Remo; Aydt, Ewald Mirko
PATENT ASSIGNEE(S): Revotar Biopharmaceuticals A.-G., Germany
SOURCE: Eur. Pat. Appl., 43 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1577289 | A1 | 20050921 | EP 2004-6461 | 20040318 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| WO 2005090284 | A1 | 20050929 | WO 2005-EP2920 | 20050318 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1732882 | A1 | 20061220 | EP 2005-716209 | 20050318 |
| R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR | | | | |

PRIORITY APPLN. INFO.: EP 2004-6461 A 20040318
WO 2005-EP2920 W 20050318

OTHER SOURCE(S): MARPAT 143:305710
GI

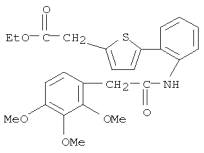
L19 ANSWER 46 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



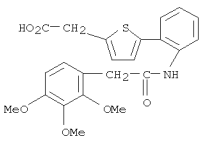
I II

AB The invention relates to compds. I [R2 = OH, R3 = H, R1 = H, CN, NO2, CF3,
F, Cl, Br, I, Me (groups Q1); R3 = OH, R2 = H, R1 = groups Q1 or Et, Pr, iPr, Bu, t-Bu, Ph, thienyl, furyl, thiazolyl (groups Q2); R3 = OH, R1 = H,
R2 = groups Q2; X = -E0-1CONH(CH2)1-2CO-, where E = NH or (CH2)1-3NH, -E0-1SO2NH(CH2)1-2(NH)0-1-, -(CH2)1-8(NH)0-1CO-, substituted phenylene- or
1,4-piperazinediyl-(NH)0-1CO-, etc.; Y = substituted Ph, anilino, piperidino, pyrrolidinyl, etc.] or their pharmaceutically-acceptable salts, esters, amides or prodrugs which can be be used to modulate the in-vitro and in-vivo binding processes mediated by E-, P- or L-selectin binding. Thus, compound II was prepared from 2-thiopheneacetic acid, 2-aminobenzeneboronic acid, and 2,3,4-trimethoxyphenylacetic acid and assayed for its ability to inhibit the binding of E-, P-, and L-selectin chimeric mols. to sLe and tyrosinesulfate residues linked to a polymeric matrix as a PSGL-1 substitute (46.5, 92.4, and 81.9 % inhibition, resp.).
IT 864518-31-0P 864518-32-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of non-glycosylated/-glycosidic/-peptidic small mol. selectin
inhibitors for treatment of inflammatory disorders)
RN 864518-31-0 CAPLUS
CN 2-Thiopheneacetic acid,
5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phen
yl]-, ethyl ester (CA INDEX NAME)

L19 ANSWER 46 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 864518-32-1 CAPLUS
CN 2-Thiopheneacetic acid,
5-[2-[[2-(2,3,4-trimethoxyphenyl)acetyl]amino]phen
yl]- (CA INDEX NAME)



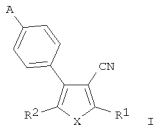
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:696900 CAPLUS
DOCUMENT NUMBER: 143:193903
TITLE: Preparation of thiophene and furan compounds for potentiating glutamate receptor function
INVENTOR(S): Castano Mansanet, Ana Maria; Dominguez-Manzanares, Esteban; Escribano, Ana Maria; Fernandez, Maria Carmen; Hornback, William Joseph; Jimenez-Aguado, Alma Maria; Tromiczak, Eric George; Wu, Zhipei; Zarrinmayeh, Hamideh; Zimmerman, Dennis Michael
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 249 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005070916 | A1 | 20050804 | WO 2005-US4 | 20050105 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1706395 | A1 | 20061004 | EP 2005-704861 | 20050105 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS | | | | |
| US 2007105852 | A1 | 20070510 | US 2006-596419 | 20060613 |
| PRIORITY APPLN. INFO.: | | | EP 2004-380005 A | 20040109 |
| | | | US 2004-552080P P | 20040310 |
| | | | WO 2005-US4 W | 20050105 |

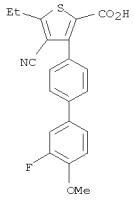
OTHER SOURCE(S): MARPAT 143:193903
GI

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



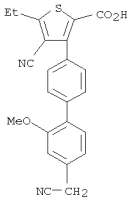
I

AB The title compds. I [C = S, O; R1 = H, F, Cl, Br, I, CHO, etc.; R2 = CN, CO2H, C(O)NHOH, etc.; A = OH, Br, I, CF3, etc.; and their pharmaceutically acceptable salts], useful in treating schizophrenia, cognitive deficits associated with schizophrenia, Alzheimer's disease, dementia of the Alzheimer's type, mild cognitive impairment, or depression (no biol. data given), were prepared Thus, the hydrolysis of the corresponding Et ester afforded the thiophene-2-carboxylic acid I [X = S; R1 = CF3; R2 = CO2H; A = 2-(MeS)C6H4]. The pharmaceutical composition comprising the compound I is disclosed.
IT 861963-07-7P 861963-39-5P 861963-41-9P
861963-76-0P 861963-86-2P 861963-88-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiophene and furan compds. for potentiating glutamate receptor function)
RN 861963-07-7 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-(3'-fluoro-4'-methoxy[1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)

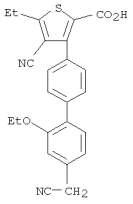


RN 861963-39-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-[4'-(cyanomethyl)-2'-methoxy[1,1'-

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
biphenyl]-4-yl]-5-ethyl- (9CI) (CA INDEX NAME)

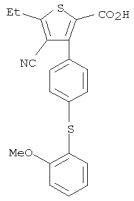


RN 861963-41-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-3-[4'-(cyanomethyl)-2'-ethoxy[1,1'-biphenyl]-4-yl]-5-ethyl- (9CI) (CA INDEX NAME)

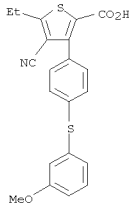


RN 861963-76-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(2-methoxyphenyl)thio]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

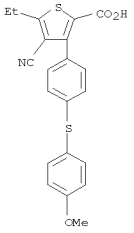


RN 861963-86-2 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(3-methoxyphenyl)thio]phenyl]- (9CI) (CA INDEX NAME)

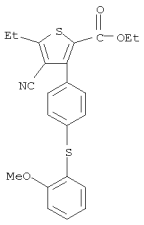


RN 861963-88-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(4-methoxyphenyl)thio]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

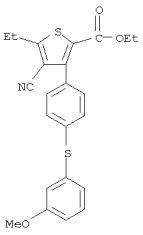


IT 861967-57-9P 861967-59-1P 861967-60-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiophene and furan compds. for potentiating glutamate receptor function)
RN 861967-57-9 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(2-methoxyphenyl)thio]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

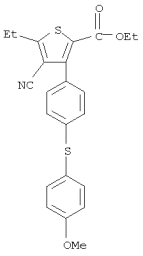


RN 861967-59-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(3-methoxyphenyl)thio]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 47 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 861967-60-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-cyano-5-ethyl-3-[4-[(4-methoxyphenyl)thio]phenyl]-, ethyl ester (9CI) (CA INDEX NAME)



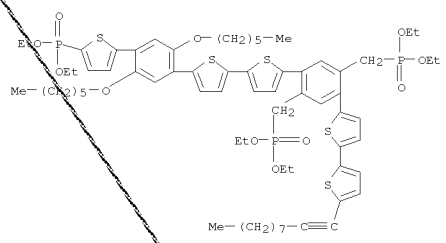
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 48 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:453567 CAPLUS
DOCUMENT NUMBER: 142:491882
TITLE: Organic species that facilitate charge transfer to or from nanostructures
INVENTOR(S): Whiteford, Jeffery A.; Buretea, Mihai A.; Nguyen, Linh; Scher, Erik
PATENT ASSIGNEE(S): Nanosys, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S. Ser. No. 656,910.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:

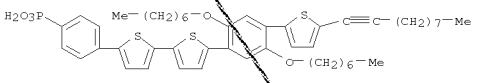
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2005109989 | A1 | 20050526 | US 2004-928625 | 20040826 |
| US 2004178390 | A1 | 20040916 | US 2003-656910 | 20030904 |
| US 6949206 | B2 | 20050927 | | |
| US 2005205849 | A1 | 20050922 | US 2005-130296 | 20050516 |
| US 2005205850 | A1 | 20050922 | US 2005-130303 | 20050516 |
| US 2007122101 | A1 | 20070531 | US 2006-342087 | 20060126 |
| US 7228050 | B2 | 20070605 | | |
| PRIORITY APPLN. INFO.: | | | US 2002-408722P P 20020905 | |
| | | | US 2003-452232P P 20030304 | |
| | | | US 2003-656910 A2 20030904 | |
| | | | US 2003-656916 A1 20030904 | |

AB The present invention provides polymeric compns. that can be used to modify charge transport across a nanocrystal surface or within a nanocrystal-containing matrix, as well as methods for making and using the novel compns.
IT 671190-72-0 852056-71-4 852056-74-7
RL: PRP (Properties)
(conductive composition; organic species that facilitate charge transfer to or from nanostructures)
RN 671190-72-0 CAPLUS
CN Phosphonic acid, [[2-[5'-(1-decynyl)[2,2'-bithiophen]-5-yl]-5-[5'-[4-[5-(diethoxyphosphinyl)-2-thienyl]-2,5-bis(hexyloxy)phenyl][2,2'-bithiophen]-5-yl]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 48 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

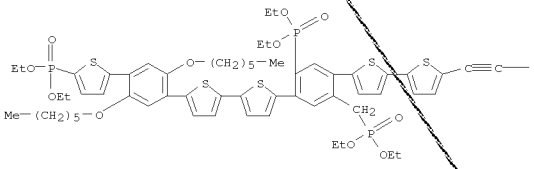


RN 852056-71-4 CAPLUS
CN Phosphonic acid, [4-[5'-[4-[5-(1-decynyl)-2-thienyl]-2,5-bis(heptyloxy)phenyl][2,2'-bithiophen]-5-yl]phenyl]- (9CI) (CA INDEX NAME)



RN 852056-74-7 CAPLUS
CN Phosphonic acid, [[2-[5'-(1-decynyl)[2,2'-bithiophen]-5-yl]-4-(diethoxyphosphinyl)-5-[5'-[4-[5-(diethoxyphosphinyl)-2-thienyl]-2,5-bis(hexyloxy)phenyl][2,2'-bithiophen]-5-yl]phenyl]methyl]-, diethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 48 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

—$(CH_2)_7$—Me

L19 ANSWER 49 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:325358 CAPLUS
DOCUMENT NUMBER: 142:392276
TITLE: Preparation of thiophene-2-carboxamide derivatives as antagonists of CB1 cannabinoid receptors and their therapeutic application
INVENTOR(S): Barth, Francis; Rinaldi, Carmona Murielle
PATENT ASSIGNEE(S): Sanofi-Synthelabo, Fr.
SOURCE: Fr. Demande, 23 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| FR 2860792 | A1 | 20050415 | FR 2003-11861 | 20031010 |
| FR 2860792 | B1 | 20060224 | | |
| WO 2005035488 | A2 | 20050421 | WO 2004-FR2546 | 20041008 |
| WO 2005035488 | A3 | 20050623 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1678159 | A2 | 20060712 | EP 2004-791498 | 20041008 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| JP 2007508279 | T | 20070405 | JP 2006-530423 | 20041008 |
| US 2006264470 | A1 | 20061123 | US 2006-400702 | 20060407 |

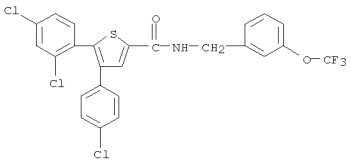
PRIORITY APPLN. INFO.: FR 2003-11861 A 20031010
WO 2004-FR2546 W 20041008

OTHER SOURCE(S): MARPAT 142:392276
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [wherein R1 = H, alkyl; R2 = alkyl, (un)substituted nonarom. carbocyclyl, 1,2,3,4-tetrahydronaphthalen-1- or 2-yl, mononitrogen heterocyclyl substituted at N, etc.; or R1NR2 = (un)substituted piperazin-1-yl, 1,4-diazepin-1-yl, pyrrolidin-1-yl; R3-R8 = independently H, halo, alkyl, alkoxy, CF3, S(O)n-alkyl; n = 0-2; their

L19 ANSWER 49 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
free bases or acid addn. salts, and their hydrates or solvates] were prepd. as antagonists of CB1 cannabinoid receptors and for treatment of the diseases it implies. For instance, II (m.p. = 232°) was prepd. by treating 2-(4-chlorophenyl)-1-(2,4-dichlorophenyl)ethanone with POCl3, and 1,2-dichloroethane in DMF at 50° for 16 h, followed by TEA-cyclization with mercaptoacetic acid, and TEA-amidation with 1-aminopiperidine. I exhibited an excellent affinity in vitro (IC50 ≤ 10-7 M) for the CB1 cannabinoid receptors. Thus, I are useful for treating psychosis, appetite and gastrointestinal disorders, smoking and alc. cessation, etc.
IT 849812-85-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(CB1 cannabinoid; preparation of thiophenecarboxamides derivs. as antagonists of CB1 cannabinoid receptors)
RN 849812-85-7 CAPLUS
CN 2-Thiophenecarboxamide, 4-(4-chlorophenyl)-5-(2,4-dichlorophenyl)-N-[[3-(trifluoromethoxy)phenyl]methyl]- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

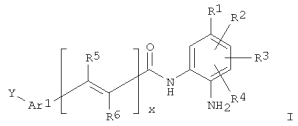
L19 ANSWER 50 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:300395 CAPLUS
DOCUMENT NUMBER: 142:355054
TITLE: Preparation of amide derivatives as inhibitors of histone deacetylase
INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana; Frechette, Sylvie; Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: PCT Int. Appl., 559 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005030705 | A1 | 20050407 | WO 2004-US31591 | 20040924 |
| WO 2005030705 | A9 | 20060420 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004276337 | A1 | 20050407 | AU 2004-276337 | 20040924 |
| CA 2539117 | A1 | 20050407 | CA 2004-2539117 | 20040924 |
| EP 1663953 | A1 | 20060607 | EP 2004-789074 | 20040924 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| CN 1882529 | A | 20061220 | CN 2004-80034571 | 20040924 |
| JP 2007506785 | T | 20070322 | JP 2006-528279 | 20040924 |

PRIORITY APPLN. INFO.: US 2003-505884P P 20030924
US 2003-532973P P 20031229
US 2004-561082P P 20040409
WO 2004-US31591 W 20040924

OTHER SOURCE(S): MARPAT 142:355054
GI

L19 ANSWER 50 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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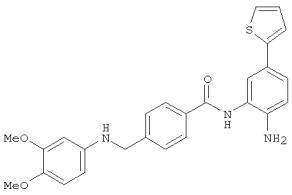
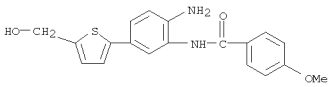


II

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction The inhibitory capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 μM. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

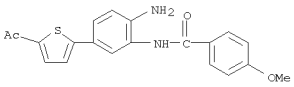
IT 849233-46-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of amide derivs. as inhibitors of histone deacetylase)

RN 849233-46-1 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(hydroxymethyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



IT 849233-65-4P 849233-80-3P 849233-82-5P 849233-84-7P 849233-85-8P 849234-99-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 849233-65-4 CAPLUS
CN Benzamide, N-[5-(5-acetyl-2-thienyl)-2-aminophenyl]-4-methoxy- (9CI) (CA INDEX NAME)



RN 849233-80-3 CAPLUS
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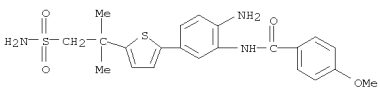
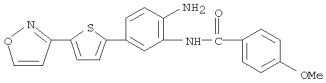
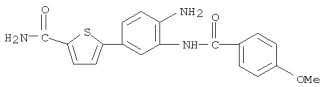


RN 849233-82-5 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(3-isoxazolyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)

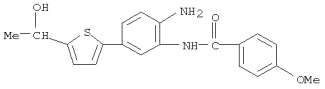
L19 ANSWER 50 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



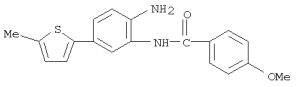
RN 849233-84-7 CAPLUS
CN 2-Thiophenecarboxamide, 5-[4-amino-3-[(4-methoxybenzoyl)amino]phenyl]- (9CI) (CA INDEX NAME)



RN 849233-85-8 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(1-hydroxyethyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



RN 849234-99-7 CAPLUS
CN Benzamide, N-[2-amino-5-(5-methyl-2-thienyl)phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 51 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:300394 CAPLUS
DOCUMENT NUMBER: 142:373563
TITLE: Preparation of amide derivatives as inhibitors of histone deacetylase
INVENTOR(S): Moradei, Oscar; Paquin, Isabelle; Leit, Silvana; Frechette, Sylvie; Vaisburg, Arkadii; Besterman, Jeffrey M.; Tessier, Pierre; Mallais, Tammy C.
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: PCT Int. Appl., 389 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

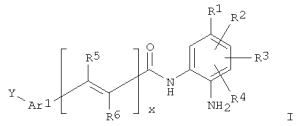
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005030704 | A1 | 20050407 | WO 2004-US31590 | 20040924 |

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-505084P P 20030924
US 2003-532973P P 20031229
US 2004-561082P P 20040409

OTHER SOURCE(S): MARPAT 142:373563
GI

L19 ANSWER 51 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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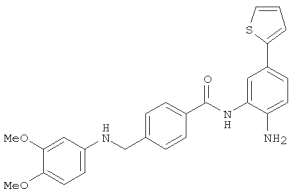
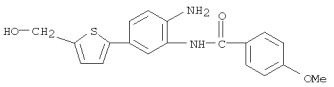


II

AB Title compds. I [Ar1 = (un)saturated-, (un)substituted-mono or fused poly-cyclic hydrocarbyl optionally containing 1-4 heteroatoms per ring; R1 = (un)substituted-mono-, -bi-, -tri-cyclic-aryl or -heteroaryl; R2, R3, and R4 independently = H, halo, amino, etc.; R5 and R6 independently = H, alkyl, aryl, etc.; x = 0-1; Y = any pharmaceutically acceptable chemical moiety consisting of 1 to 50 atoms with provisions] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of histone deacetylase. Thus, e.g., II was prepared by Suzuki coupling of 2-bromo-2-nitro-phenylamine (preparation given) with 2-thiopheneboronic acid followed by carbonylation with 4-[3,4-dimethoxy-(phenylamino)-methyl]benzoic acid (preparation given) and subsequent reduction The inhibitory capability of I towards antiproliferative activity of histone deacetylase enzyme was evaluated using 3-[4,5-dimethylthiazol-2-yl-2,5-diphenyltetrazolium] bromide (MTT) assay and it revealed that certain compds. of the invention had MTT IC 50 values in the range of below 1 up to 20 μM. I as histone deacetylase inhibitors should prove useful in the treatment of diseases such as, but not limited to, cell proliferative disease, protozoal disease, and fungal disease.

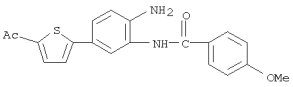
IT 849233-46-1P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(prepn. of amide derivs. as inhibitors of histone deacetylase)

RN 849233-46-1 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(hydroxymethyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



IT 849233-65-4P 849233-80-3P 849233-82-5P
849233-84-7P 849233-85-8P 849234-99-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amide derivs. as inhibitors of histone deacetylase)

RN 849233-65-4 CAPLUS
CN Benzamide, N-[5-(5-acetyl-2-thienyl)-2-aminophenyl]-4-methoxy- (9CI) (CA INDEX NAME)



RN 849233-80-3 CAPLUS
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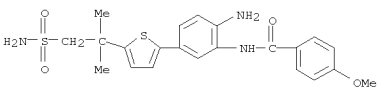
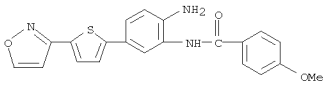
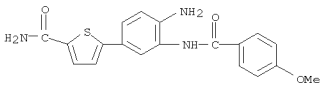


RN 849233-82-5 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(3-isoxazolyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)

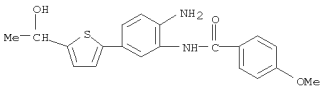
L19 ANSWER 51 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



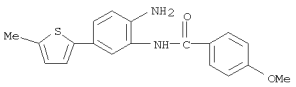
RN 849233-84-7 CAPLUS
CN 2-Thiophenecarboxamide, 5-[4-amino-3-[(4-methoxybenzoyl)amino]phenyl]- (9CI) (CA INDEX NAME)



RN 849233-85-8 CAPLUS
CN Benzamide, N-[2-amino-5-[5-(1-hydroxyethyl)-2-thienyl]phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



RN 849234-99-7 CAPLUS
CN Benzamide, N-[2-amino-5-(5-methyl-2-thienyl)phenyl]-4-methoxy- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 52 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

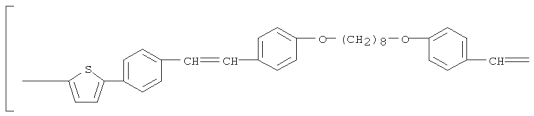
ACCESSION NUMBER: 2005:183226 CAPLUS
DOCUMENT NUMBER: 143:97720
TITLE: Synthesis and luminescent properties of aromatic-thiophene copolymers
AUTHOR(S): Wu, Sheng-Han; Tsiang, Raymond Chien-Chao
CORPORATE SOURCE: Department of Chemical Engineering, National Chung Cheng University, Chiayi, 621, Taiwan
SOURCE: PMSE Preprints (2005), 93, 3-4
CODEN: PPMRA9; ISSN: 1550-6703
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; (computer optical disk)
LANGUAGE: English

AB A series of thiophene-based photoactive copolymers Poly 2-[4-(2-phenylethylene)phenyl]-5-{4-[2-(4-1,8-octanedioxyphenyl)ethylene]phenyl}thiophene and Poly 2-{4-[2-(3-ethoxyphenyl)ethylene]phenyl}-5-{4-[2-(3-ethoxy, 4-1,8-octanedioxyphenyl)ethylene]phenyl}thiophene consisting of alternating conjugated and nonconjugated segments were synthesized. 1H-NMR spectrum corroborated the well-defined structures, and both of copolymers were soluble in common organic solvents. The relative PL quantum efficiency were measured as 0.46 and 0.59 for these two copolymers, resp. As the results, the PL quantum efficiency increased with an increase in the electron-donating power of the substituent. Both copolymers emitted bluish-green to green light above the threshold bias of 5.0 V under the ambient condition.

IT 770720-62-2P 770720-63-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and luminescent properties of aromatic-thiophene copolymers)

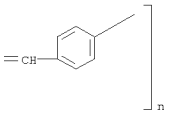
RN 770720-62-2 CAPLUS
CN Poly(2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenyleneoxy-1,8-octanediyloxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



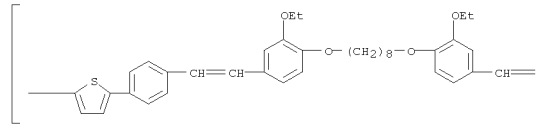
L19 ANSWER 52 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

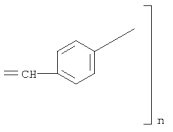


RN 770720-68-8 CAPLUS
CN Poly[2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl(3-ethoxy-1,4-phenylene)oxy-1,8-octanediyloxy(2-ethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L19 ANSWER 53 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

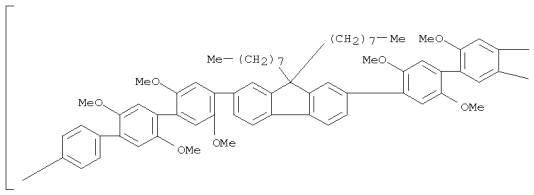
ACCESSION NUMBER: 2005:167237 CAPLUS
DOCUMENT NUMBER: 142:393038
TITLE: A novel photoresponsive π-conjugated polymer based on diarylethene and its photoswitching effect in electrical conductivity
AUTHOR(S): Kawai, Tsuyoshi; Nakashima, Yukiko; Irie, Masahiro
CORPORATE SOURCE: Department of Chemistry and Biochemistry Graduate School of Engineering, Kyushu University, Fukuoka, 812-8581, Japan
SOURCE: Advanced Materials (Weinheim, Germany) (2005), 17(3), 309-314
CODEN: ADVMEW; ISSN: 0935-9648
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Photochromic conductivity modulation of conjugated polymers containing a diarylethene unit with high photochromic conversion ratios is described. The elec. conductivity can be switched quasi-reversibly from the bleached low-conductivity state (Figure, left) and the blue high-conductivity state (right) by alternate irradiation with visible and UV light, and may lead to applications in photon-mode mol. memory devices.

IT 850080-63-6P
RL: PEP (Properties); SPN (Synthetic preparation); PREP (Preparation) (photoresponsive π-conjugated polymer based on diarylethene and its photoswitching effect in elec. conductivity)

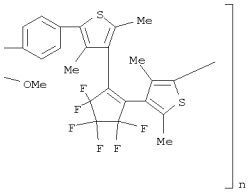
RN 850080-63-6 CAPLUS
CN Poly[(3,5-dimethyl-2,4-thiophenediyl)(3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)(3,5-dimethyl-4,2-thiophenediyl)(2',2'',5',5''-tetramethoxy[1,1':4',1''-terphenyl]-4,4''-diyl)(9,9-dioctyl-9H-fluorene-2,7-diyl)(2,2',5,5'-tetramethoxy[1,1':4',1''-terphenyl]-4,4''-diyl)] (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 53 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



REFERENCE COUNT: 75 THERE ARE 75 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L19 ANSWER 54 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2005:122800 CAPLUS
DOCUMENT NUMBER: 142:191201
TITLE: Antimicrobial biaryl compounds
INVENTOR(S): Jefferson, Elizabeth Anne; Swayze, Eric E.; Seth, Punit P.; Robinson, Dale E.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 25 pp., Cont.-in-part of U.S. Ser. No. 630,122.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

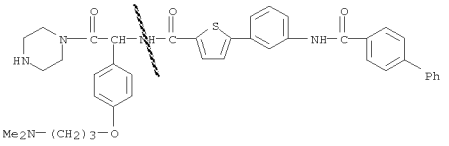
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2005032805 | A1 | 20050210 | US 2004-914256 | 20040809 |
| US 6849660 | B1 | 20050201 | US 2000-630122 | 20000801 |
| PRIORITY APPLN. INFO.: | | | US 2000-630122 | A2 20000801 |

OTHER SOURCE(S): MARPAT 142:191201

AB Provided are antibacterial biaryl compds. having micromolar MIC activity against Gram-neg. and Gram-pos. pathogens, including a methicillin-resistant S. aureus strain. Other embodiments of invention are methods of treating bacterial infection in a mammal by administering to the mammal an effective amount of a compound described herein. The inhibitory effect of some of the compds. on bacterial translation was determined

IT 838820-34-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antibacterial biaryl compds. in relation to inhibiting bacterial translation and overcoming methicillin resistance)

RN 838820-34-1 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-[([1,1'-biphenyl]-4-ylcarbonyl)amino]phenyl]-N-[1-[4-[3-(dimethylamino)propoxy]phenyl]-2-oxo-2-(1-piperazinyl)ethyl]- (9CI) (CA INDEX NAME)



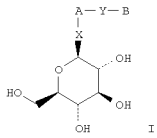
L19 ANSWER 55 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:120950 CAPLUS
DOCUMENT NUMBER: 142:219491
TITLE: Preparation of glycosides as antidiabetic agents and having inhibitory activity against sodium-dependant transporter
INVENTOR(S): Nomura, Sumihiro; Kawanishi, Eiji; Ueta, Kiichiro
PATENT ASSIGNEE(S): Tanabe Seiyaku Co., Ltd., Japan
SOURCE: PCT Int. Appl., 221 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005012326 | A1 | 20050210 | WO 2004-JP11312 | 20040730 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004260761 | A1 | 20050210 | AU 2004-260761 | 20040730 |
| CA 2534024 | A1 | 20050210 | CA 2004-2534024 | 20040730 |
| EP 1651658 | A1 | 20060503 | EP 2004-771314 | 20040730 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| CN 1829729 | A | 20060906 | CN 2004-80022007 | 20040730 |
| BR 2004013232 | A | 20061003 | BR 2004-13232 | 20040730 |
| JP 2007518683 | T | 20070712 | JP 2006-519251 | 20040730 |
| US 2005233988 | A1 | 20051020 | US 2005-45446 | 20050131 |
| NO 2006000220 | A | 20060502 | NO 2006-220 | 20060116 |
| MX 2006PA01274 | A | 20060411 | MX 2006-PA1274 | 20060131 |
| IN 2006CN00734 | A | 20070608 | IN 2006-CN734 | 20060228 |
| US 2006217323 | A1 | 20060928 | US 2006-446014 | 20060602 |
| US 2006229260 | A1 | 20061012 | US 2006-453728 | 20060615 |
| US 2006234954 | A1 | 20061019 | US 2006-453727 | 20060615 |
| US 2006293251 | A1 | 20061228 | US 2006-453726 | 20060615 |

PRIORITY APPLN. INFO.: US 2003-491534P P 20030801
US 2003-491523P P 20030801
US 2003-519155P P 20031112
US 2003-519209P P 20031112
US 2003-519210P P 20031112

L19 ANSWER 55 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
US 2003-519381P P 20031112
US 2004-579722P P 20040615
US 2004-579730P P 20040615
US 2004-579758P P 20040615
US 2004-579792P P 20040615
US 2004-903034 A3 20040730
US 2004-903136 A3 20040730
US 2004-903233 A3 20040730
US 2004-903234 A3 20040730
WO 2004-JP11312 W 20040730

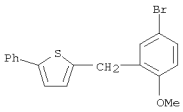
OTHER SOURCE(S): MARPAT 142:219491
GI



I

AB Glycosides I, wherein A and B are: (1) A is unsatd. monocyclic heterocyclic, and B is unsatd. monocyclic heterocyclic, unsatd. fused hetero-bicyclic, or benzene, (2) A is benzene, and B is unsatd. monocyclic heterocyclic or unsatd. fused hetero-bicyclic, or (3) A is unsatd. fused hetero-bicyclic, and B are independently unsatd. monocyclic heterocyclic, unsatd. fused hetero-bicyclic, or benzene; X is a carbon atom or a nitrogen atom; Y is -(CH2)n- (n is 1 or 2); a pharmaceutically acceptable salt thereof, or a prodrug thereof. A method is claimed for treating or delaying the progression or onset of diabetes mellitus, diabetic retinopathy, diabetic neuropathy, diabetic nephropathy, delayed wound healing, insulin resistance, hyperglycemia, hyper-insulinemia, elevated blood levels of fatty acids, elevated blood levels of glycerol, hyperlipidemia, obesity, hypertriglyceridemia, Syndrome X, diabetic complications, atherosclerosis, or hypertension. The pharmaceutical compns. may be orally administered to mammalian species including human beings, apes, dogs, etc., for example, in the dosage form of tablet, capsule, granule or powder, or parenterally administered in the form of injection prepn., or intra-nasally, or in the form of tranucleosideermal patch. Thus, 1-(β-D-glucopyranosyl)-4-chloro-3-(6-ethyl-benzo[b]thiophen-2-yl-methyl)benzene was prepd. as antidiabetic agent and having inhibitory activity against sodium-dependent transporter.

IT 842135-51-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of glycosides as antidiabetic agents and having inhibitory activity against sodium-dependant transporter)
RN 842135-51-7 CAPLUS
CN Thiophene, 2-[(5-bromo-2-methoxyphenyl)methyl]-5-phenyl- (9CI) (CA INDEX NAME)



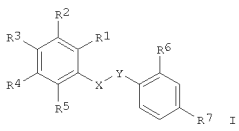
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 56 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:96443 CAPLUS
DOCUMENT NUMBER: 142:176557
TITLE: Preparation of benzoic and phenylacetic acid derivatives as HNF-4α modulators
INVENTOR(S): Mapes, Christopher; Karanewsky, Donald; Thompson, Anthony; Michellys, Pierrre; Ruppar, Daniel; Chen, Jyun-hung
PATENT ASSIGNEE(S): Ligand Pharmaceuticals Incorporated, USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2005009104 | A2 | 20050203 | WO 2004-US23788 | 20040716 |
| WO 2005009104 | A3 | 20051229 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |

PRIORITY APPLN. INFO.: US 2003-487915P P 20030716

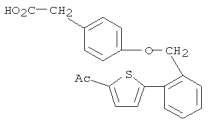
OTHER SOURCE(S): CASREACT 142:176557; MARPAT 142:176557
GI



I

AB Title compds. I [R1 = H, halo, alkyl, etc.; R2, R4 = H, halo, alkyl, alkenyl, etc.; R3 = H, halo, acyl, Me, etc.; R5 = H, halo, alkyl, alkenyl, etc.; R6 = H, halo, Me, methoxy; R7 = CH2OH, CHO, carboxy, etc.; X, Y = (un)substituted methylene, alkyl, etc.] are prepared For instance, 4-(2-phenylbenzyloxy)phenylacetic acid (II) is prepared from 2-phenylbenzyl bromide and Me 4-hydroxyphenylacetate (DMF, Cs2CO3) and the resulting product converted to the acid (MeOH, THF, H2O, LiOH). II has Ki = 500 nM for the HNF-4α receptor. I are useful for the treatment of, e.g.,

L19 ANSWER 56 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
diabetes, cancer and obesity.
IT 833484-74-5P, 4-[2-(5-Acetyl-2-thienyl)benzyloxy]phenylacetic acid
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzoic and phenylacetic acid derivs. as HNF-4α modulators)
RN 833484-74-5 CAPLUS
CN Benzeneacetic acid, 4-[[2-(5-acetyl-2-thienyl)phenyl]methoxy]- (9CI) (CA INDEX NAME)



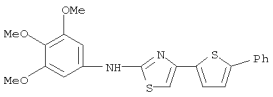
L19 ANSWER 57 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1124566 CAPLUS
DOCUMENT NUMBER: 142:49264
TITLE: aryl compounds and uses in modulating amyloid β
INVENTOR(S): Cheng, Soan; Comer, Daniel D.; Mao, Long; Balow, Guity
P.; Pleynet, David
PATENT ASSIGNEE(S): Neurogenetics, Inc., USA
SOURCE: PCT Int. Appl., 178 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004110350 | A2 | 20041223 | WO 2004-US15239 | 20040514 |
| WO 2004110350 | A3 | 20050303 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004247013 | A1 | 20041223 | AU 2004-247013 | 20040514 |
| CA 2525547 | A1 | 20041223 | CA 2004-2525547 | 20040514 |
| US 2005070538 | A1 | 20050331 | US 2004-846941 | 20040514 |
| US 7244739 | B2 | 20070717 | | |
| EP 1628666 | A2 | 20060301 | EP 2004-752297 | 20040514 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK | | | | |
| BR 2004010348 | A | 20060530 | BR 2004-10348 | 20040514 |
| CN 1787822 | A | 20060614 | CN 2004-80012784 | 20040514 |
| JP 2007504282 | T | 20070301 | JP 2006-533094 | 20040514 |
| ZA 2005009153 | A | 20060830 | ZA 2005-9153 | 20051111 |
| MX 2005PA12281 | A | 20060519 | MX 2005-PA12281 | 20051114 |

PRIORITY APPLN. INFO.: US 2003-470884P P 20030514
US 2003-532260P P 20031222
WO 2004-US15239 W 20040514

OTHER SOURCE(S): MARPAT 142:49264
AB Aryl compds., compns., and kits are provided. Methods of modulating Aβ levels, and methods of treating a disease associated with aberrant Aβ levels, are also provided. Preparation of compds., e.g. (I, (A)La(B)Lb(C)Lc(D)) is included.
IT 810663-19-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

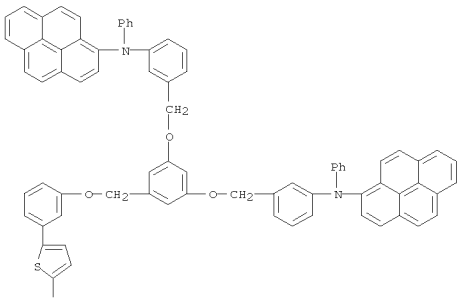
L19 ANSWER 57 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(Biological study); USES (Uses)
(aryl compds. and uses in modulating amyloid β)
RN 810663-19-5 CAPLUS
CN 2-Thiazolamine, 4-(5-phenyl-2-thienyl)-N-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 58 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1086454 CAPLUS
DOCUMENT NUMBER: 142:219658
TITLE: Energy and Electron Transfer in Bifunctional Non-Conjugated Dendrimers
AUTHOR(S): Thomas, K. R. Justin; Thompson, Alexis L.; Sivakumar, Aathimanikandan V.; Bardeen, Christopher J.; Thayumanavan, S.
CORPORATE SOURCE: Department of Chemistry, University of Massachusetts, Amherst, MA, 01003, USA
SOURCE: Journal of the American Chemical Society (2005), 127(1), 373-383
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:219658
AB Nonconjugated dendrimers, which are capable of funneling energy from the periphery to the core followed by a charge-transfer process from the core to the periphery, were synthesized. The energy and electron donors involve a diarylaminopyrene unit and are incorporated at the periphery of these dendrimers. The energy and electron acceptor is at the core of the dendrimer, which involves a chromophore based on a benzthiadiazole moiety.
The backbone of the dendrimers is benzyl ether based. A direct electron-transfer quenching of the excited state of the periphery or a sequential energy transfer-electron-transfer pathway are the two limiting mechanisms of the observed photophys. properties. The latter mechanism is
prevalent in these dendrimers. The energy transfer occurs on a picosecond
time scale, while the charge-transfer process occurs on a nanosecond time scale. The lifetime of the charge separated species was in the range of microseconds. Energy transfer efficiency of 80-90% was determined using both
steady-state and time-resolved measurements, while charge-transfer efficiency of 70-80% was deduced from fluorescence quenching of the core chromophore. The dependence of the energy and charge-transfer processes on dendrimer generation is analyzed in terms of the backfolding of the flexible benzyl ether backbone, which leads to a weaker dependence of the energy and charge-transfer efficiency on dendrimer size than would be expected for a rigid system.
IT 840531-18-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(G1 dendrimer; energy and electron transfer in prepared benzyl ether non-conjugated dendrimers with benzthiadiazole core and diarylaminopyrene units)
RN 840531-18-2 CAPLUS
CN 1-Pyrenamine, N,N',N'',N'''-[2,1,3-benzothiadiazole-4,7-diylbis[5,2-thiophenediyl-3,1-phenyleneoxymethylene-5,1,3-benzenetriylbis(oxymethylene-3,1-phenylene)]]tetrakis[N-phenyl- (CA INDEX NAME)

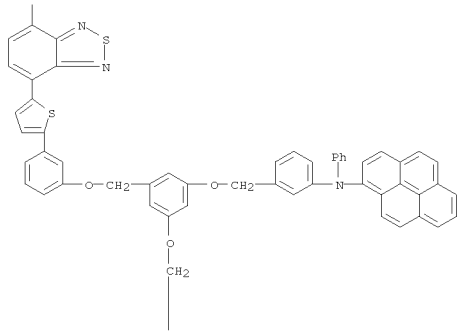
L19 ANSWER 58 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

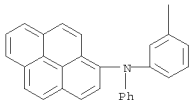


L19 ANSWER 58 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

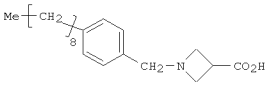


PAGE 3-A



REFERENCE COUNT: 98 THERE ARE 98 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 59 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:1048937 CAPLUS
DOCUMENT NUMBER: 142:147835
TITLE: A Rational Utilization of High-Throughput Screening Affords Selective, Orally Bioavailable 1-Benzyl-3-carboxyazetidine Sphingosine-1-phosphate-1 Receptor Agonists
AUTHOR(S): Hale, Jeffrey J.; Lynch, Christopher L.; Neway, William; Mills, Sander G.; Hajdu, Richard; Keohane, Carol Ann; Rosenbach, Mark J.; Milligan, James A.; Shei, Gan-Ju; Parent, Stephen A.; Chrebet, Gary; Bergstrom, James; Card, Deborah; Ferrer, Marc; Hodder, Peter; Strulovici, Berta; Rosen, Hugh; Mandala, Suzanne
CORPORATE SOURCE: Departments of Medicinal Chemistry and Immunology and Rheumatology Research, Merck Research Laboratories, Rahway, NJ, 07065, USA
SOURCE: Journal of Medicinal Chemistry (2004), 47(27), 6662-6665
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:147835
GI



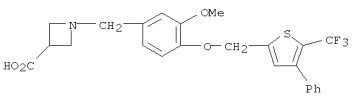
I

AB Moderately potent, selective S1P1 receptor agonists identified from high-throughput screening have been adapted into lipophilic tails for a class of orally bioavailable amino acid-based S1P1 agonists represented by I. Many of the new compds. are potent S1P1 agonists that select against the S1P2, S1P3, and S1P4 (although not S1P5) receptor subtypes. Two of the analogs are highly orally bioavailable and possess excellent pharmacokinetic profiles in the rat, dog, and rhesus monkey.

IT 570423-78-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(1-benzyl-3-carboxyazetidine derivs. as EDG-1 receptor agonists and immunosuppressants: high-throughput screening for oral bioavailability and preparation)

RN 570423-78-8 CAPLUS
CN 3-Azetidinecarboxylic acid, 1-[[3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-

L19 ANSWER 59 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
2-thienyl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



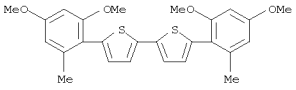
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 60 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:907986 CAPLUS
DOCUMENT NUMBER: 142:56144
TITLE: Improved studies of cross-coupling reactions of 5,5'-bis(tri-n-butystannyl)- and 5,5'-bis(tri-n-butylstannyl)-2,2'-bithiophene with aryl halides
AUTHOR(S): Hamad Elgazwy, Abdel-Sattar S.
CORPORATE SOURCE: Department of Chemistry, Faculty of Science, University of Ain Shams, Cairo, 11566, Egypt
SOURCE: Journal of Heterocyclic Chemistry (2004), 41(5), 755-759
CODEN: JHTCAD, ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:56144

AB Stille coupling under standard conditions proceeds in low yield when using hindered organostannanes (1) or (2) and aryl bromide partners. The inclusion of aryl iodide instead of aryl bromide with the same organostannanes, significantly improves the efficiency of the coupling, providing a variety of desired products in good to excellent yield. The yields of Stille coupling are compared to the different reactivity of aryl halides. This study of Stille coupling with different aryl halides are documented and rationalized.

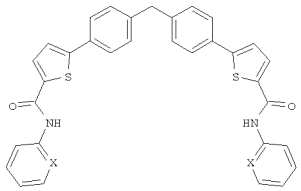
IT 808148-70-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Pd-catalyzed Stille cross-coupling reactions (tributylstannyl)bithiophene with aryl halides to give mono- and diarylbithiophenes)

RN 808148-70-1 CAPLUS
CN 2,2'-Bithiophene, 5,5'-bis(2,4-dimethoxy-6-methylphenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 61 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:907017 CAPLUS
DOCUMENT NUMBER: 142:279996
TITLE: Molecular recognition: Studies on the synthesis of methylene pivotal bisthiophene carboxamide derivatives as ditopic receptors for suberic acid
AUTHOR(S): Brahma, Sulagna; Pan, Dipanjan; Ray, Jayanta K.
CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology, Kharagpur, 721302, India
SOURCE: Supramolecular Chemistry (2004), 16(6), 447-452
CODEN: SCHEER; ISSN: 1061-0278
PUBLISHER: Taylor & Francis Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:279996
GI

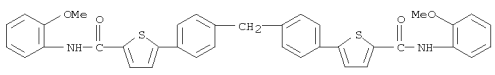


I

AB New mol. receptors I (X = N, MeOC) with diphenylmethane as a spacer and functional groups complementary to suberic acid have been developed. The high affinity of I (X = N) for suberic acid has been found.

IT 847228-15-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and geometry calcns. of diphenylmethane-linked bis(thiophenecarboxamide)s as ditopic receptors for mol. recognition of suberic acid)

RN 847228-15-3 CAPLUS
CN 2-Thiophenecarboxamide, 5,5'-(methylenedi-4,1-phenylene)bis[N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 61 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

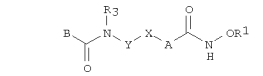
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 62 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:902333 CAPLUS
DOCUMENT NUMBER: 141:379916
TITLE: Novel hydroxamates as histone deacetylase inhibitors, process for their preparations, pharmaceutical compositions and uses in the treatment of cancer and hepatitis C
INVENTOR(S): Verner, Eric J.; Sendzik, Martin; Baskaran, Chitra; Buggy, Joseph J.; Robinson, James
PATENT ASSIGNEE(S): Axys Pharmaceuticals Inc., USA
SOURCE: PCT Int. Appl., 149 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

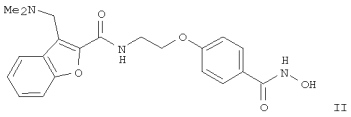
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004092115 | A2 | 20041028 | WO 2004-US10549 | 20040406 |
| WO 2004092115 | A3 | 20050317 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2004230889 | A1 | 20041028 | AU 2004-230889 | 20040406 |
| CA 2521647 | A1 | 20041028 | CA 2004-2521647 | 20040406 |
| US 2005187261 | A1 | 20050825 | US 2004-818755 | 20040406 |
| EP 1611088 | A2 | 20060104 | EP 2004-749791 | 20040406 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR | | | | |
| BR 2004009227 | A | 20060328 | BR 2004-9227 | 20040406 |
| CN 1768031 | A | 20060503 | CN 2004-80009225 | 20040406 |
| JP 2006522157 | T | 20060928 | JP 2006-509735 | 20040406 |
| IN 2005KN01918 | A | 20061110 | IN 2005-KN1918 | 20050926 |
| LV 13394 | B | 20060620 | LV 2005-141 | 20051103 |
| NO 2005005216 | A | 20051208 | NO 2005-5216 | 20051104 |
| PRIORITY APPLN. INFO.: | | | US 2003-461286P P | 20030407 |
| | | | US 2003-464448P P | 20030421 |
| | | | WO 2004-US10549 W | 20040406 |

OTHER SOURCE(S): MARPAT 141:379916
GI

L19 ANSWER 62 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I



II

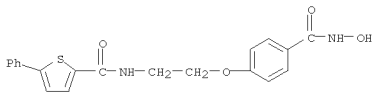
AB Title compds. I [wherein X = O, NR2 or S(O)n; n = 0-2; R1, R2 = H or alkyl; Y = alkyl(thio/sulfinyl/sulfonyl), OH, (un)substituted alkylene, Ph, phenylalkyl(thio/sulfonyl) or phenoxy; A = (un)substituted phenylene or heteroarylene; R3 = H, (hydroxy)alkyl or (un)substituted phenyl; B = (hetero)(aryl/aralkyl), (hetero)aralkenyl, (hetero)cycloalkyl(alkyl); or pharmaceutically acceptable salts thereof] were prepared Pharmaceutical compns. comprising I and processes for the prepns. of I and their intermediates are disclosed. Compds. I are inhibitors of histone deacetylase (HDAC) and therefore are useful in the treatment of diseases associated with HDAC activity, such as cancer. They are also useful in the treatment of hepatitis C. In the biol. tests, I were found to inhibit the growth of HCT116 tumor cells, and most of them had Ki values of <40 nM against HDAC. Thus, hydroxamate II was synthesized in six steps starting from 3-methyl-benzofuran-2-carboxylic acid, via esterification with methanol, NBS bromination, substitution of the bromide with dimethylamine, ester hydrolysis, coupling with Me 4-(2-aminoethoxy)benzoate and condensation with hydroxylamine.

IT 783353-29-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of novel hydroxamates as histone deacetylase inhibitors for the treatment of cancer and hepatitis C)

RN 783353-29-7 CAPLUS

CN 2-Thiophenecarboxamide, N-[2-[4-[(hydroxyamino)carbonyl]phenoxy]ethyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 62 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 63 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:861108 CAPLUS
DOCUMENT NUMBER: 142:56937
TITLE: Synthesis, Self-Assembly, and Characterization of Supramolecular Polymers from Electroactive Dendron Rodcoil Molecules
AUTHOR(S): Messmore, Benjamin W.; Hulvat, James F.; Sone, Eli D.; Stupp, Samuel I.
CORPORATE SOURCE: Department of Chemistry, the Department of Materials Science & Engineering, and the Feinberg School of Medicine, Northwestern University, Evanston, IL, 60208, USA
SOURCE: Journal of the American Chemical Society (2004), 126(44), 14452-14458
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:56937

AB We report here the synthesis and self-assembly of a series of three mols. with dendron rodcoil architecture that contain conjugated segments of oligo(thiophene), oligo(phenylene-vinylene), and oligo(phenylene). Despite their structural differences, all three mols. yield similar self-assembled structures. Electron and atomic force microscopy reveals the self-assembly of the mols. into high aspect ratio ribbon-like nanostructures which at low concns. induce gelation in nonpolar solvent. Self-assembly results in a blue-shifted absorption spectrum and a red-shifted, quenched fluorescence spectrum, indicating aggregation of the conjugated segments within the ribbon-like structures. The assembly of these mols. into one-dimensional nanostructures is a route to π-π stacked supramol. polymers for organic electronic functions. In the oligo(thiophene) derivative, self-assembly leads to a 3 orders of magnitude increase in the conductivity of iodine-doped films due to self-assembly. We also found that elec. field alignment of these supramol. assemblies can be used to create arrays of self-assembled nanowires on a device substrate.

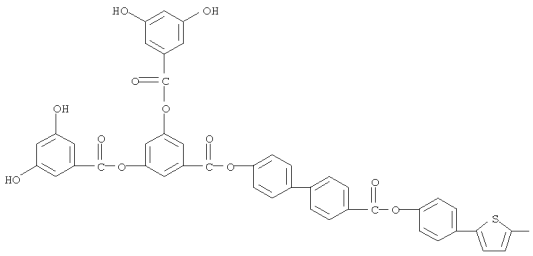
IT 808142-50-9P 808142-65-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis, self-assembly, and characterization of supramol. polymers from electroactive dendron rodcoil mols.)

RN 808142-50-9 CAPLUS

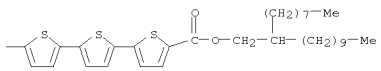
CN [2,2':5',2'':5'',2'''-Quaterthiophene]-5-carboxylic acid, 5'''-[4-[[[4'-[[3,5-bis[(3,5-dihydroxybenzoyl)oxy]benzoyl]oxy][1,1'-biphenyl]-4-yl]carbonyl]oxy]phenyl]-, 2-octyldodecyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 63 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

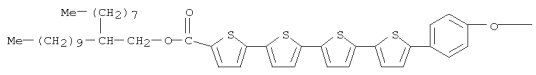


RN 808142-65-6 CAPLUS

CN [2,2':5',2'':5'',2'''-Quaterthiophene]-5-carboxylic acid, 5'''-[4-[[3,5-bis[(3,5-dihydroxybenzoyl)oxy]benzoyl]oxy]phenyl]-, 2-octyldodecyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 63 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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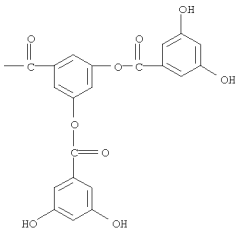
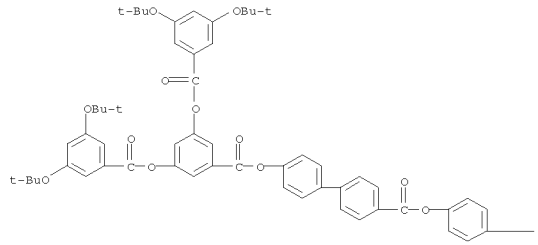


IT 808142-49-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis, self-assembly, and characterization of supramol. polymers from electroactive dendron rodcoil mols.)
RN 808142-49-6 CAPLUS
CN [2,2':5',2'':5'',2'''-Quaterthiophene]-5-carboxylic acid,

5'''-[4-[[[4'-[[3,5-bis[[3,5-bis(1,1-dimethylethoxy)benzoyl]oxy]benzoyl]oxy][1,1'-biphenyl]-4-yl]carbonyl]oxy]phenyl]-, 2-octyldodecyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 63 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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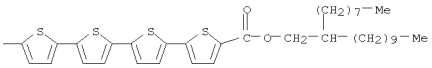


REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:817666 CAPLUS
DOCUMENT NUMBER: 141:309638
TITLE: Inhibitors of cathepsin S for use in disease treatment
INVENTOR(S): Liu, Hong; Tully, David; Epple, Robert; Bursulaya, Badry; Williams, Jennifer; Chatterjee, Arnab; Harris, Jennifer Leslie; Li, Jun
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004084842 | A2 | 20041007 | WO 2004-US9218 | 20040324 |
| WO 2004084842 | A3 | 20041125 | | |

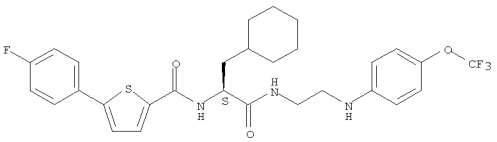
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

| | | | | |
|---|---|---|---|---|
| US 2004198780 | A1 | 20041007 | US 2004-807612 | 20040323 |
| US 7109243 | B2 | 20060919 | | |
| PRIORITY APPLN. INFO.: | | | US 2003-457595P | P 20030324 |
| | | | US 2004-807612 | A 20040323 |

OTHER SOURCE(S): MARPAT 141:309638
AB The present invention provides WC(:O)NHCH2CH2NHAr [W = R1X(C:O)NHCHR2; R1 = (substituted)phenyl, pyridyl, or pyridinium N-oxide; X = furanyl, NHCH2, OCH2, phenylene, etc.; R2 = (substituted)phenyl, etc.; Ar = (substituted phenyl)] compds. and methods for the selective inhibition of cathepsin S. In a preferred aspect, cathepsin S is selectively inhibited in the presence of at least one other cathepsin isoenzyme (e.g., cathepsin K). The present invention also provides methods for treating a disease state in a subject by selectively inhibiting cathepsin S.
IT 768363-84-4P 768363-90-2P 768363-91-3P
768363-96-8P 768364-01-8P 768364-04-1P
768364-16-5P 768365-43-1P 768365-45-3P
768365-54-4P 768365-58-8P 768365-60-2P
768365-62-4P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitors of cathepsin S for use in disease treatment)
RN 768363-84-4 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-(4-fluorophenyl)-

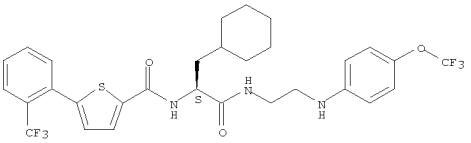
L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



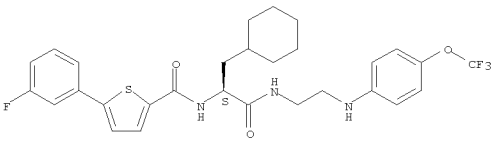
RN 768363-90-2 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 768363-91-3 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-(3-fluorophenyl)-(9CI) (CA INDEX NAME)

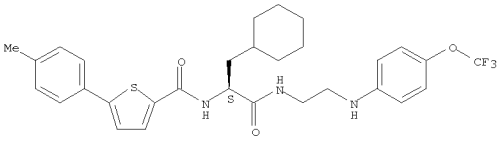
Absolute stereochemistry.



RN 768363-96-8 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-(4-methylphenyl)-(9CI) (CA INDEX NAME)

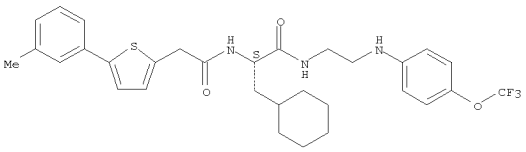
L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.



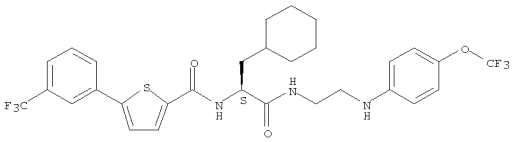
RN 768364-01-8 CAPLUS
CN 2-Thiopheneacetamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-(3-methylphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



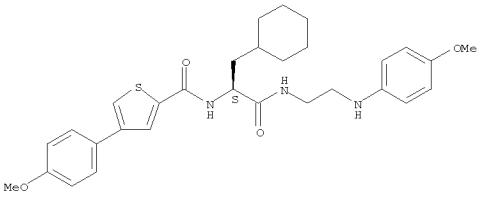
RN 768364-04-1 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



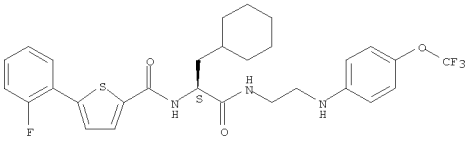
RN 768364-16-5 CAPLUS

L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



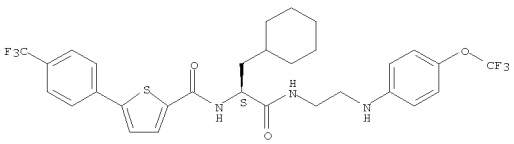
RN 768365-54-4 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-(2-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 768365-58-8 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

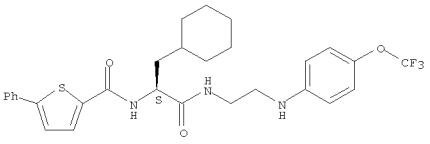
Absolute stereochemistry.



RN 768365-60-2 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-[4-

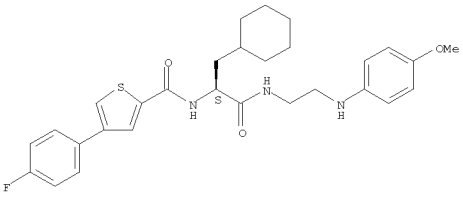
L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 768365-43-1 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-[[2-[(4-methoxyphenyl)amino]ethyl]amino]-2-oxoethyl]-4-(4-fluorophenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



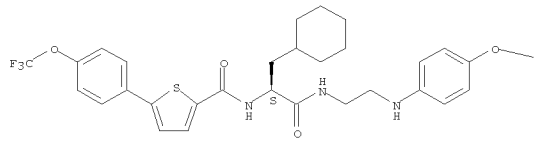
RN 768365-45-3 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-[[2-[(4-methoxyphenyl)amino]ethyl]amino]-2-oxoethyl]-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



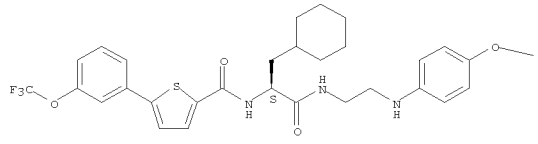
PAGE 1-B



RN 768365-62-4 CAPLUS
CN 2-Thiophenecarboxamide, N-[(1S)-1-(cyclohexylmethyl)-2-oxo-2-[[2-[[4-(trifluoromethoxy)phenyl]amino]ethyl]amino]ethyl]-5-[3-(trifluoromethoxy)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

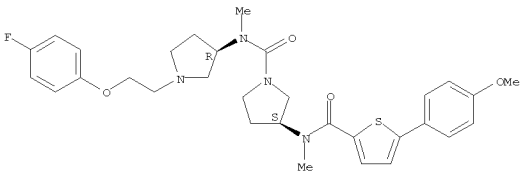
L19 ANSWER 64 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

benzoyl chloride. Methods for evaluation of compds. are described (no data). Also disclosed are compns. contg. a compd. of this invention, as well as methods relating to the use thereof.

IT 762283-65-8P 762300-82-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of carboxamidopyrrolidine derivs. as melanin-concentrating hormone receptor antagonists)

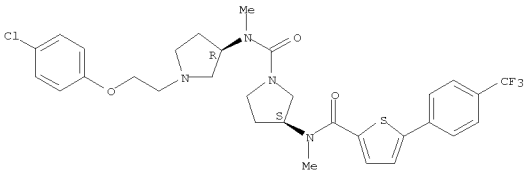
RN 762283-65-8 CAPLUS
CN 1-Pyrrolidinecarboxamide, N-[(3R)-1-[2-(4-fluorophenoxy)ethyl]-3-pyrrolidinyl]-3-[[[5-(4-methoxyphenyl)-2-thienyl]carbonyl]methylamino]-N-methyl-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 762300-82-3 CAPLUS
CN 1-Pyrrolidinecarboxamide, N-[(3R)-1-[2-(4-chlorophenoxy)ethyl]-3-pyrrolidinyl]-N-methyl-3-[methyl[[5-[4-(trifluoromethyl)phenyl]-2-thienyl]carbonyl]amino]-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L19 ANSWER 65 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:780696 CAPLUS
DOCUMENT NUMBER: 141:295849
TITLE: Preparation of carboxamidopyrrolidines as melanin-concentrating hormone receptor antagonists and compositions and methods related thereto
INVENTOR(S): Goodfellow, Val; Rowbottom, Martin; Dyck, Brian P.; Tamiya, Junko; Zhang, Mingzhu; Grey, Jonathan; Vickers, Troy D.
PATENT ASSIGNEE(S): Neurocrine Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 180 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004081005 | A1 | 20040923 | WO 2004-US7259 | 20040308 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2006178403 | A1 | 20060810 | US 2004-797927 | 20040308 |
| PRIORITY APPLN. INFO.: | | | US 2003-452776P P | 20030307 |
| | | | US 2003-518265P P | 20031107 |

OTHER SOURCE(S): MARPAT 141:295849
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [m = 0 or 1; n = 1 or 2; X = -CH2-, or -N(R6)-; R1 = H, (un)substituted-alkyl, -aryl, -arylalkyl, etc.; R2 and R5 independently = H, (un)substituted alkyl; R3 = H, (un)substituted-alkyl, -arylalkyl, -heteroarylalkyl; R4 = (un)substituted-alkyl, -aryl, -heterocycle; R6 = H or (un)substituted alkyl] and their pharmaceutically acceptable salt, are disclosed as melanin-concentrating hormone (MCH) receptor antagonists having utility for the treatment of MCH receptor-based disorders such as obesity.
Thus, e.g., II was prepared via amidation of of III (preparation given) with

L19 ANSWER 66 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:780502 CAPLUS
DOCUMENT NUMBER: 141:295848
TITLE: Preparation of bis(3-aminopyrrolidin-1-yl)methanones as melanin-concentrating hormone receptor antagonists for treatment of obesity and other disorders
INVENTOR(S): Goodfellow, Val; Rowbottom, Martin; Dyck, Brian P.; Tamiya, Junko; Zhang, Mingzhu; Grey, Jonathan; Vickers, Troy; Kiankarimi, Mehrak; Wade, Warren; Hudson, Sarah Clough
PATENT ASSIGNEE(S): Neurocrine Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004080411 | A2 | 20040923 | WO 2004-US7260 | 20040308 |
| WO 2004080411 | A3 | 20041216 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
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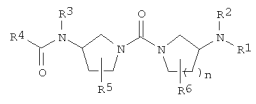
| US 2004259931 | A1 | 20041223 | US 2004-797487 | 20040308 |
| US 7067509 | B2 | 20060627 | | |
| PRIORITY APPLN. INFO.: | | | US 2003-452709P P | 20030307 |

OTHER SOURCE(S): MARPAT 141:295848
GI



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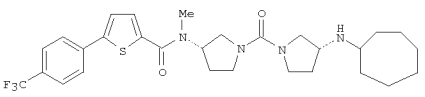


II

L19 ANSWER 66 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title pyrrolidinamines I [wherein n = 0, 1; R1 = H, (un)substituted (aryl)alkyl, heterocyclyl(alkyl); R2 = H, (un)substituted alkyl, COR7, SO2R8; or NR1R2 = (un)substituted heterocyclyl; R3, R5, R6, R8 = independently H, (un)substituted alkyl; R4 = (un)substituted alkyl, (hetero)aryl, heterocyclyl; R7 = independently H, OH, alkoxy, (un)substituted alkyl, aryl, heterocyclyl; R9 = OH, alkoxy, (un)substituted alkyl, aryl; and stereoisomers, prodrugs, or pharmaceutically acceptable salts thereof] were prepared as melanin-concentrating hormone (MCH) receptor antagonists. For example, a 6-step synthesis starting from (R)-3-amino-1-benzylpyrrolidine, 4-nitrophenyl (S)-3-[(tert-butoxycarbonyl)(methyl)amino]pyrrolidine-1-carboxylate, 4-trifluoromethyl-5-phenylthiophene-2-carboxylic acid, and cycloheptanone gave II. Over half of the exemplified invention compds., including II, exhibited the ability to bind to the human [125I]-MCH receptor with Ki values <1 μM. Thus, I and their pharmaceutical compns. are useful for the treatment of MCH receptor-based disorders, such as obesity, anxiety, depression, digestive disorders, fertility, sexual function disorders, and urinary disorders (no data).

IT 764720-84-5P

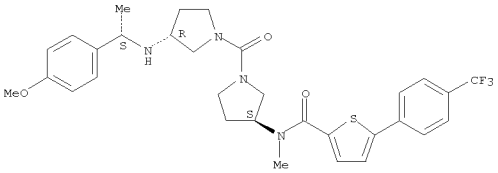
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(MCH receptor antagonist; preparation of pyrrolidinamines as MCH receptor antagonists for treatment of obesity and other disorders)

RN 764720-84-5 CAPLUS

CN 2-Thiophenecarboxamide, N-[(3S)-1-[[(3R)-3-[[(1S)-1-(4-methoxyphenyl)ethyl]amino]-1-pyrrolidinyl]carbonyl]-3-pyrrolidinyl]-N-methyl-5-[4-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L19 ANSWER 67 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:775886 CAPLUS

DOCUMENT NUMBER: 141:295736

TITLE: A preparation of benzene derivatives, useful as KCNQ channel modulators

INVENTOR(S): Brown, William Dalby; Teuber, Lene; Dahl, Bjarne H.

PATENT ASSIGNEE(S): Neurosearch A/S, Den.

SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004080377 | A2 | 20040923 | WO 2004-EP50290 | 20040311 |
| WO 2004080377 | A3 | 20041104 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1603858 | A2 | 20051214 | EP 2004-719459 | 20040311 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK | | | | |
| JP 2006523196 | T | 20061012 | JP 2006-505460 | 20040311 |
| US 2006173058 | A1 | 20060803 | US 2005-546533 | 20050831 |

PRIORITY APPLN. INFO.: DK 2003-370 A 20030311
WO 2004-EP50290 W 20040311

OTHER SOURCE(S): MARPAT 141:295736

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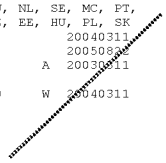
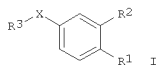


L19 ANSWER 67 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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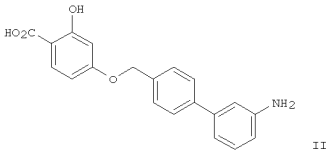


II

AB The invention relates to a preparation of benzene derivs. of formula I [wherein: R1 is OH, CN, CO2H, C(O)NH2, or tetrazolyl, etc.; R2 is haloalkyl, (cyclo)alkoxy, or NH2, etc.; R3 is (cyclo)alkyl, alkenyl, hydroxyalkyl, or carboxyalkyl, etc.; X is O, OCH2, OC(O), C(O), or N:CH, etc.], useful as modulators of KCNQ channel. For instance, benzene derivative II was found to be an activator of the KCNQ channel (electrophysiol. determination: Ik = 115%).

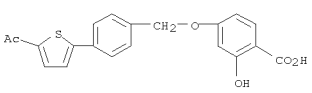
IT 761455-98-5P 761456-10-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of benzene derivs., useful as KCNQ channel modulators)

RN 761455-98-5 CAPLUS

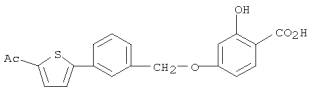
CN Benzoic acid, 4-[[4-(5-acetyl-2-thienyl)phenyl]methoxy]-2-hydroxy- (9CI) (CA INDEX NAME)



RN 761456-10-4 CAPLUS

CN Benzoic acid, 4-[[3-(5-acetyl-2-thienyl)phenyl]methoxy]-2-hydroxy- (9CI) (CA INDEX NAME)

L19 ANSWER 67 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

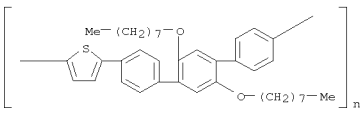


L19 ANSWER 68 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:742173 CAPLUS
DOCUMENT NUMBER: 141:395919
TITLE: Palladium-Catalyzed Cross-Coupling Reactions in the Synthesis of Novel Aromatic Polymers
AUTHOR(S): Lightowler, Stephen; Hird, Michael
CORPORATE SOURCE: Department of Chemistry, University of Hull, Hull, HU6 7RX, UK
SOURCE: Chemistry of Materials (2004), 16(20), 3963-3971
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Several aromatic polymers were prepared through palladium-catalyzed cross-coupling reactions involving two single Ph ring units, one containing two bromo substituents and the other containing either two boronic ester moieties or two tributyltin moieties. These sets of reactions were carried out under different conditions (catalyst, solvent, and base) to optimize the yield, the d.p., and the polydispersity. Following optimization of the reaction conditions, a series of substituted polymers were prepared to show the scope of the methodol. The synthesis of the polymerizable aromatic intermediates proved interesting and challenging, particularly those with many substituents.

IT 787554-84-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(palladium-catalyzed cross-coupling reactions and polymns. to obtain octyloxy- and variously substituted phenyl-chain polymers)

RN 787554-84-1 CAPLUS
CN Poly[2,5-thiophenediyl[2',5'-bis(octyloxy)[1,1':4',1''-terphenyl]-4,4''-diyl]] (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 69 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:663448 CAPLUS
DOCUMENT NUMBER: 141:332565
TITLE: Synthesis and characterization of new light-emitting copolymers in polymeric-light-emitting-diode device fabrications
AUTHOR(S): Wu, Sheng-Han; Shen, Chi-Hsien; Chen, Jar-Hung; Hsu, Chia-Chen; Tsiang, Raymond Chien-Chao
CORPORATE SOURCE: Department of Chemical Engineering, National Chung Cheng University, Chiayi, 621, Taiwan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry (2004), 42(16), 3954-3966
CODEN: JPACEC; ISSN: 0887-624X
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

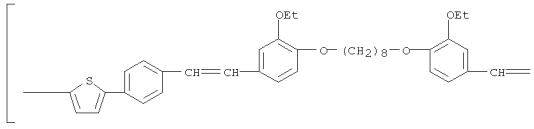
AB A series of thiophene-containing photoactive copolymers consisting of alternating conjugated and nonconjugated segments were synthesized. The 1H NMR spectra corroborated the well-defined structures, and the copolymers not only were soluble in common organic solvents but also had high glass-transition temps. (ca. 130°) and good thermal stability up to 390°. Introducing aliphatic functional groups, such as alkyl or alkoxyl, into chromophores of the copolymers red shifted the photoluminescence spectra and lowered the optical bandgaps. The electrochem. bandgaps calculated from cyclic voltammetry agreed with the optical bandgaps and thus indicated that electroluminescence and photoluminescence originated from the same excited state. The energy levels (HOMO and LUMO) of all the copolymers were lower than those of poly[2-methoxy-5-(2'-ethylhexyloxy)-1,4-phenylene-1,4-phenylene] MEH-PPV, indicating balanced hole and electron injection, which led to improved performance in both single-layer and double-layer polymeric light-emitting-diode devices fabricated with these copolymers. All the copolymers emitted bluish-green or green light above the threshold bias of 5.0 V under ambient conditions. At the maximum bias of 10 V, the electroluminescence of a device made of poly(2-{4-[2-(3-ethoxyphenyl)ethylene]phenyl}-5-{4-[2-(3-ethoxy,4-1,8-octanedioxyphenyl)ethylene]phenyl}thiophene) was 5836 cd/m2. The external electroluminescence efficiency decreased with the lifetime as the polymer degraded.

IT 770720-68-8P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(preparation and characterization of thiophene-containing photoactive copolymers in polymeric light-emitting-diode device fabrications)

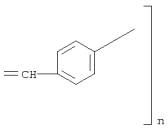
RN 770720-68-8 CAPLUS
CN Poly[2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl(3-ethoxy-1,4-phenylene)oxy-1,8-octanediyloxy(2-ethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 69 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



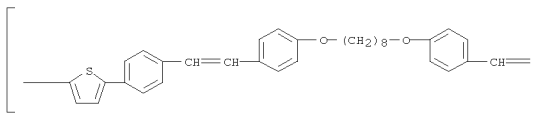
PAGE 1-B



IT 770720-62-2P 770720-64-4P 770720-66-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of thiophene-containing photoactive copolymers in polymeric light-emitting-diode device fabrications)

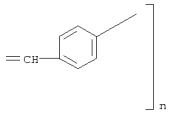
RN 770720-62-2 CAPLUS
CN Poly(2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl-1,4-phenyleneoxy-1,8-octanediyloxy-1,4-phenylene-1,2-ethenediyl-1,4-phenylene) (9CI) (CA INDEX NAME)

PAGE 1-A



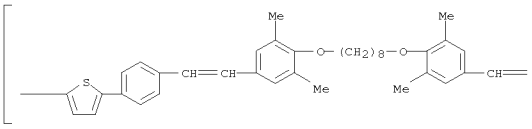
L19 ANSWER 69 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

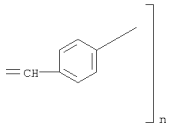


RN 770720-64-4 CAPLUS
CN Poly[2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethyl-1,4-phenylene)oxy-1,8-octanediyloxy(2,6-dimethyl-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



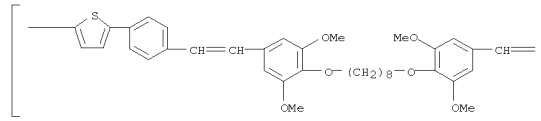
PAGE 1-B



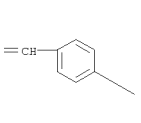
RN 770720-66-6 CAPLUS
CN Poly[2,5-thiophenediyl-1,4-phenylene-1,2-ethenediyl(3,5-dimethoxy-1,4-phenylene)oxy-1,8-octanediyloxy(2,6-dimethoxy-1,4-phenylene)-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 69 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

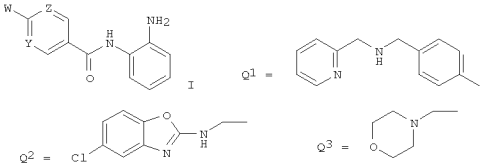
L19 ANSWER 70 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:589250 CAPLUS
DOCUMENT NUMBER: 141:140470
TITLE: Preparation of aminophenylbenzamides as inhibitors of histone deacetylase
INVENTOR(S): Delorme, Daniel; Zhou, Zhihong
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: U.S. Pat. Appl. Publ., 318 pp., Cont.-in-part of U.S. Ser. No. 242,304.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2004142953 | A1 | 20040722 | US 2003-358556 | 20030204 |
| US 6897220 | B2 | 20050524 | | |
| US 2004106599 | A1 | 20040603 | US 2002-242304 | 20020912 |
| AU 2004210016 | A1 | 20040819 | AU 2004-210016 | 20040204 |
| CA 2515338 | A1 | 20040819 | CA 2004-2515338 | 20040204 |
| WO 2004069823 | A1 | 20040819 | WO 2004-CA139 | 20040204 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| EP 1590340 | A1 | 20051102 | EP 2004-707852 | 20040204 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1723207 | A | 20060118 | CN 2004-80001769 | 20040204 |
| BR 2004007195 | A | 20060214 | BR 2004-7195 | 20040204 |
| JP 2006514998 | T | 20060518 | JP 2005-518241 | 20040204 |
| JP 3908773 | B2 | 20070425 | | |
| US 2006058298 | A1 | 20060316 | US 2005-81095 | 20050315 |
| JP 2005255683 | A | 20050922 | JP 2005-80310 | 20050318 |
| US 2005288282 | A1 | 20051229 | US 2005-91025 | 20050325 |
| MX 2005PA08246 | A | 20051005 | MX 2005-PA8246 | 20050802 |
| IN 2005KN01604 | A | 20061103 | IN 2005-KN1604 | 20050810 |
| AU 2006252047 | A1 | 20070111 | AU 2006-252047 | 20061214 |

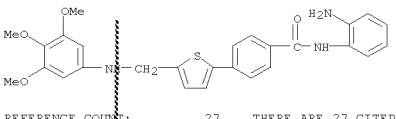
PRIORITY APPLN. INFO.:
US 2001-322402P P 20010914
US 2002-391728P P 20020626
US 2002-242304 A2 20020912
AU 2002-327627 A3 20020912
JP 2003-528544 A3 20020912
US 2003-358556 A 20030204

L19 ANSWER 70 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
WO 2004-CA139 W 20040204

OTHER SOURCE(S): MARPAT 141:140470
GI



AB Title compds. e.g. (I; Y, Z = N, CH; W = Q1, Q2, Q3, etc.), were prepared Thus, 4-[[(4-Amino-6-(2-indanylamino)-[1,3,5]triazin-2-yl)amino]methyl]benzoic acid (preparation given) in DMF was stirred with Et3N, BOP, and 1,2-phenylenediamine to give 63% 4-[[(4-Amino-6-(2-indanylamino)-[1,3,5]triazin-2-yl)amino]methyl]-N-(2-aminophenyl)benzamide. The latter inhibited human histone deacetylase HDAC-1 with IC50 = 0.4 μM.
IT 503042-76-0P, N-(2-Aminophenyl)-4-(5-(((3,4,5-trimethoxyphenyl)amino)methyl)thien-2-yl)benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of aminophenylbenzamides as inhibitors of histone deacetylase for treating cell proliferative disorders)
RN 503042-76-0 CAPLUS
CN Benzamide, N-(2-aminophenyl)-4-[5-[[(3,4,5-trimethoxyphenyl)amino]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)



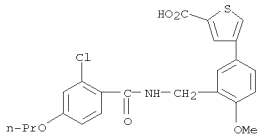
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 71 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:533148 CAPLUS
DOCUMENT NUMBER: 141:82334
TITLE: Carboxylate analogs for increasing blood HDL level as antiarteriosclerotics
INVENTOR(S): Miyashita, Sadakazu; Shinoda, Masanobu; Hiyoshi Hironobu; Matsuura, Fumiyoshi
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 229 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2004182657 | A | 20040702 | JP 2002-352069 | 20021204 |

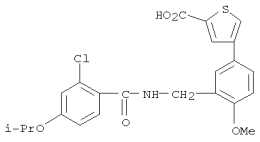
PRIORITY APPLN. INFO.:
JP 2002-352069 20021204

OTHER SOURCE(S): MARPAT 141:82334
AB Carboxylate analogs (I, YXXTZUMW wherein L, M, T = (substituted) C1-6 alkylene; W = carboxy, etc., X = O, etc.) are claimed for increasing blood HDL level without affecting triglycerides as antiarteriosclerotics. I were prepared, and their effects on blood lipids were studied.
IT 478371-42-5P 478372-43-6P 478372-60-0P 478372-61-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(blood HDL increasing agents as antiarteriosclerotics)
RN 478371-42-5 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-4-methoxyphenyl]- (9CI) (CA INDEX NAME)

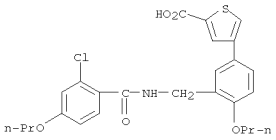


RN 478371-43-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-4-methoxyphenyl]- (9CI) (CA INDEX NAME)

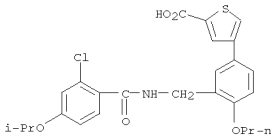
L19 ANSWER 71 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 478372-60-0 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[(2-chloro-4-propoxybenzoyl)amino]methyl]-4-propoxyphenyl]- (9CI) (CA INDEX NAME)



RN 478372-61-1 CAPLUS
CN 2-Thiophenecarboxylic acid, 4-[3-[[[2-chloro-4-(1-methylethoxy)benzoyl]amino]methyl]-4-propoxyphenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 72 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:453192 CAPLUS
DOCUMENT NUMBER: 141:6919
TITLE: Preparation of substituted aralkyl derivatives as antidiabetic, hypolipidemic and hypocholesterolemic agents
INVENTOR(S): Lohray, Braj Bhushan; Lohray, Vidya Bhushan; Jain, Mukul R.; Basu, Sujay; Pingali, Harikishore; Raval, Saurin K.; Raval, Preeti S.
PATENT ASSIGNEE(S): Cadila Healthcare Limited, India
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004046119 | A1 | 20040603 | WO 2003-IN358 | 20031114 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| IN 2002MU00992 | A | 20060901 | IN 2002-MU992 | 20021115 |
| IN 2003MU00792 | A | 20050401 | IN 2003-MU792 | 20030812 |
| CA 2506112 | A1 | 20040603 | CA 2003-2506112 | 20031114 |
| AU 2003302111 | A1 | 20040615 | AU 2003-302111 | 20031114 |
| EP 1569916 | A1 | 20050907 | EP 2003-808341 | 20031114 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003015713 | A | 20050913 | BR 2003-15713 | 20031114 |
| CN 1738807 | A | 20060222 | CN 2003-80108836 | 20031114 |
| JP 2006514976 | T | 20060518 | JP 2004-570329 | 20031114 |
| MX 2005PA05063 | A | 20050816 | MX 2005-PA5063 | 20050511 |
| NO 2005002413 | A | 20050726 | NO 2005-2413 | 20050513 |
| US 2006142277 | A1 | 20060629 | US 2005-534726 | 20051118 |

PRIORITY APPLN. INFO.:
IN 2002-MU992 A 20021115
IN 2003-MU792 A 20030812
WO 2003-IN358 W 20031114

OTHER SOURCE(S): MARPAT 141:6919
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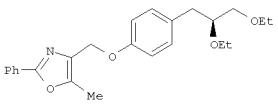
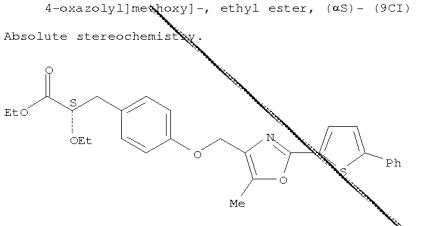
L19 ANSWER 72 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I

AB The present invention relates to novel substituted aralkyl derivs. of formula A(CH2)nX-Ar-CH2CH(R)CHR1R2 [A = (substituted) aryl, heteroaryl, heterocyclyl; n = 1-3; X = O, S; Ar = aromatic, heteroarom. or heterocyclic group; R, R1 = (substituted) amino, (substituted) OH, N3, CN, COOH, tetrazolyl, etc.; R2 = H, alkyl, cycloalkyl], their derivs., their analogs, their tautomeric forms, their pharmaceutically acceptable salts, their pharmaceutically acceptable solvates, pharmaceutical compns. containing them, use of these compds. in medicine and the intermediates involved in their preparation The compds. are useful as antidiabetic, hypolipidemic and hypocholesterolemic agents. Thus, I was prepared, and lowered serum triglyceride in Swiss albino mice by 78%.
IT 696661-77-5P 696661-81-1P 696662-07-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aralkyl derivs. as antidiabetic, hypolipidemic and hypocholesterolemic agents)
RN 696661-77-5 CAPLUS
CN Benzenepropanoic acid, α-ethoxy-4-[[5-methyl-2-(5-phenyl-2-thienyl)-4-oxazolyl]methoxy]-, ethyl ester, (αS)- (9CI) (CA INDEX NAME)

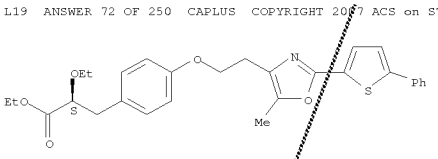
Absolute stereochemistry.



RN 696661-81-1 CAPLUS
CN Benzenepropanoic acid, α-ethoxy-4-[2-[5-methyl-2-(5-phenyl-2-thienyl)-4-oxazolyl]ethoxy]-, ethyl ester, (αS)- (9CI) (CA INDEX NAME)

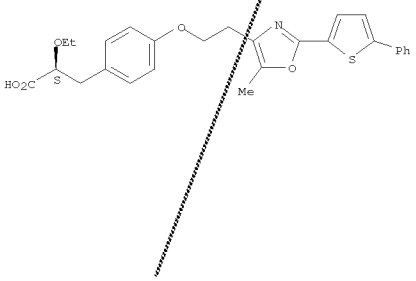
Absolute stereochemistry.

L19 ANSWER 72 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 696662-07-4 CAPLUS
CN Benzenepropanoic acid, α-ethoxy-4-[2-[5-methyl-2-(5-phenyl-2-thienyl)-4-oxazolyl]ethoxy]-, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

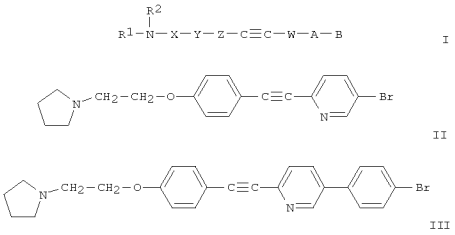


L19 ANSWER 73 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:390227 CAPLUS
DOCUMENT NUMBER: 140:406742
TITLE: Preparation of ethynylpyridines and related compounds as melanin-concentrating hormone receptor (MCH-1) antagonist for the treatment of metabolic disorders.
INVENTOR(S): Mueller, Stephan-Georg; Stenkamp, Dirk; Arndt, Kirsten; Roth, Gerald Juergen; Lotz, Ralf Richard Hermann; Lehmann-Lintz, Thorsten; Lenter, Martin; Lustenberger, Phillpp; Rudolf, Klaus
PATENT ASSIGNEE(S): Boehringer Ingelheim, Germany
SOURCE: PCT Int. Appl., 361 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004039780 | A1 | 20040513 | WO 2003-EP11887 | 20031025 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| DE 10250708 | A1 | 20040519 | DE 2002-10250708 | 20021031 |
| CA 2504160 | A1 | 20040513 | CA 2003-2504160 | 20031025 |
| AU 2003300507 | A1 | 20040525 | AU 2003-300507 | 20031025 |
| EP 1558578 | A1 | 20050803 | EP 2003-809734 | 20031025 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003014839 | A | 20050830 | BR 2003-14839 | 20031025 |
| CN 1732154 | A | 20060208 | CN 2003-80102635 | 20031025 |
| JP 2006511492 | T | 20060406 | JP 2004-547566 | 20031025 |
| US 2004209865 | A1 | 20041021 | US 2003-697443 | 20031030 |
| NO 2005000749 | A | 20050523 | NO 2005-749 | 20050211 |
| MX 2005PA03629 | A | 20050930 | MX 2005-PA3629 | 20050405 |
| PRIORITY APPLN. INFO.: | | | DE 2002-10250708 A | 20021031 |
| | | | US 2003-456543P P | 20030321 |
| | | | WO 2003-EP11887 W | 20031025 |

OTHER SOURCE(S): MARPAT 140:406742
GI

L19 ANSWER 73 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



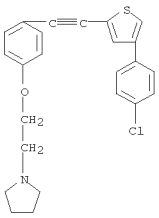
I

II

III

AB Title compds. I [R1, R2 = H, (un)substituted alkyl, cycloalkyl, etc; X = alkyl, alkenyl, alkynyl, etc.; W, Z = alkylene with provisos; Y = Cy with provisos; A = Cy; B = Cy, alkyl, alkenyl, etc.; Cy = (un)subsituted carbocycle, heterocycle] and their pharmaceutically acceptable salts and formulations were prepared For example, palladium mediated coupling of bromopyridine II, e.g., prepared from 4-iodophenol in 2-steps, and 4-bromophenylboronic acid afforded claimed ethynylpyridine III in 11% yield. In melanin concentrating hormone receptor (MCH-1R) binding assays, 2-examples of compds. I exhibited IC50 values ranging from 8-74 nM, e.g., the IC50 of ethynylpyridine III was 8 nM. Compds. I are claimed useful for the treatment of metabolic disorders and/or eating disorders, in particular, obesity, bulimia, anorexia, hyperphagia and diabetes.
IT 690266-85-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of ethynylpyridines and related compds. as melanin-concentrating hormone receptor (MCH-1) antagonist for the treatment of metabolic disorders.)
RN 690266-85-4 CAPLUS
CN Pyrrolidine, 1-[2-[4-[[4-(4-chlorophenyl)-2-thienyl]ethynyl]phenoxy]ethyl]- (9CI) (CA INDEX NAME)

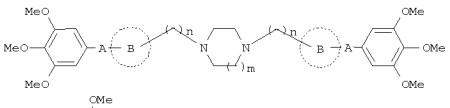
L19 ANSWER 73 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



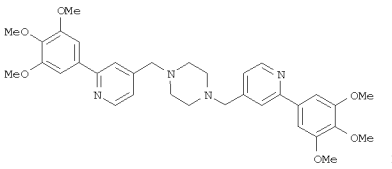
L19 ANSWER 74 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:333577 CAPLUS
DOCUMENT NUMBER: 140:357386
TITLE: Preparation of piperazine and homopiperazine derivatives for treatment of cancers
INVENTOR(S): Mataki, Chikage; Kodama, Tatsuhiko; Doi, Takeshi; Tamura, Masahiro; Oda, Toshiaki; Ohkuchi, Masao
PATENT ASSIGNEE(S): Kowa Co., Ltd., Japan
SOURCE: PCT Int. Appl., 124 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004032931 | A1 | 20040422 | WO 2003-JP13047 | 20031010 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003272973 | A1 | 20040504 | AU 2003-272973 | 20031010 |
| PRIORITY APPLN. INFO.: | | | US 2002-417643P P | 20021011 |
| | | | WO 2003-JP13047 W | 20031010 |

OTHER SOURCE(S): MARPAT 140:357386
GI



I



II

L19 ANSWER 74 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

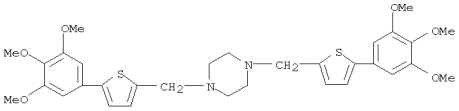
AB The title compds. I [wherein A = a single bond, C.tplbond.C, CONH, or NHCO; ring B = heterocycle, etc.; m = 1 or 2; n = 1-5] or salts, or hydrates thereof are prepared for the treatment of cancers. For example, the compound II was prepared in a multi-step synthesis comprising reaction of 4-(chloromethyl)-2-(3,4,5-trimethoxyphenyl)pyridine (preparation given) and piperazine (91%). II showed strong anticancer effect against various cancers, such as human breast cancer, colorectal cancer, lung cancer, gastric cancer, and prostate cancer. Formulations containing I as an active ingredient were also described.

IT 473844-14-3P 681277-34-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of piperazine and homopiperazine derivs. for treatment of cancers)

RN 473844-14-3 CAPLUS
CN Piperazine, 1,4-bis[[5-(3,4,5-trimethoxyphenyl)-2-thienyl]methyl]-, (2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

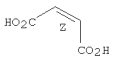
CRN 473844-13-2
CMF C32 H38 N2 O6 S2



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

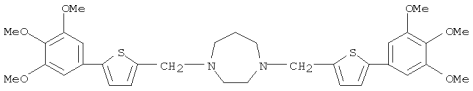


L19 ANSWER 74 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 681277-34-9 CAPLUS
CN 1H-1,4-Diazepine, hexahydro-1,4-bis[[5-(3,4,5-trimethoxyphenyl)-2-thienyl]methyl]-, (2E)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

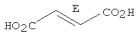
CRN 473844-15-4
CMF C33 H40 N2 O6 S2



CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

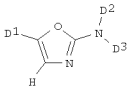
L19 ANSWER 75 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:331949 CAPLUS
DOCUMENT NUMBER: 140:339318
TITLE: Preparation of 1,3-oxazol-2-amines as VEGFR2, CDK2, and CDK4 inhibitors
INVENTOR(S): Brown, Matthew Lee; Cheung, Mui; Dickerson, Scott Howard; Gauthier, Cassandra; Harris, Philip Anthony; Hunter, Robert Neil, III; Pacofsky, Gregory; Peel, Michael Robert; Stafford, Jeffrey Alan
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 213 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004032882 | A2 | 20040422 | WO 2003-US33317 | 20031010 |
| WO 2004032882 | A3 | 20040708 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003287178 | A1 | 20040504 | AU 2003-287178 | 20031010 |
| EP 1551813 | A2 | 20050713 | EP 2003-781357 | 20031010 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006503081 | T | 20060126 | JP 2004-543799 | 20031010 |
| US 2005288515 | A1 | 20051229 | US 2005-530810 | 20050408 |
| US 7189712 | B2 | 20070313 | | |
| US 2007142437 | A1 | 20070621 | US 2007-670498 | 20070202 |

PRIORITY APPLN. INFO.: US 2002-417548P P 20021010
WO 2003-US33317 W 20031010
US 2005-530810 A3 20050408

OTHER SOURCE(S): MARPAT 140:339318
GI



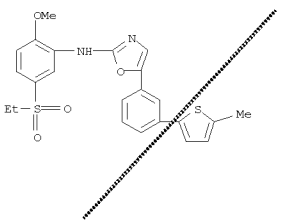
I

L19 ANSWER 75 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB The title compds. [I; D1 = (un)substituted aryl, heteroaryl, heterocyclyl; D2 = H, alkyl; D3 = (un)substituted aryl, heteroaryl] which are useful as VEGFR2, CDK2, and CDK4 inhibitors in the treatment of hyperproliferative diseases, were prepared E.g., a 5-step synthesis of I [D1 = 3-MeOC6H4; D2 = H; D3 = Ph], starting from 2-bromo-1-(3-methoxyphenyl)ethanone, was given. Different compds. I are particularly effective at inhibiting CDK2 and/or CDK4 enzymes at 0.0001 to 1 μM and addnl. show specificity relative to other kinases. The specific data for representative compds. I are given. The pharmaceutical compns. comprising the compound I are claimed.

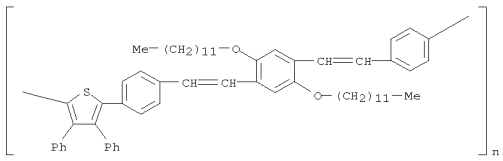
IT 681004-04-6P, N-[5-(Ethylsulfonyl)-2-methoxyphenyl]-5-(3-(5-methylthien-2-yl)phenyl)-1,3-oxazol-2-amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,3-oxazol-2-amines as VEGFR2, CDK2, and CDK4 inhibitors for treating cancer)

RN 681004-04-6 CAPLUS
CN 2-Oxazolamine, N-[5-(ethylsulfonyl)-2-methoxyphenyl]-5-[3-(5-methyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 76 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:279581 CAPLUS
DOCUMENT NUMBER: 141:24042
TITLE: Synthesis and optical properties of poly(p-phenylenevinylene)s bearing tetraphenylthiophene or dibenzothiophene moieties along the main chain
AUTHOR(S): Mikroyannidis, John A.; Spiliopoulos, Ioakim K.; Kulkarni, Abhishek P.; Jenekhe, Samson A.
CORPORATE SOURCE: Chemical Technology Laboratory, Department of Chemistry, University of Patras, Patras, GR-26500, Greece
SOURCE: Synthetic Metals (2004), 142(1-3), 113-120
CODEN: SYMEDZ, ISSN: 0379-6779
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 2,5-Bis(4-iodophenyl)-3,4-diphenylthiophene was synthesized by a four-step reaction starting from benzylchloride and sulfur. This reacted with 1,4-didodecyloxy-2,5-divinylbenzene to afford polymer P1. In addition, dibenzothiophene was brominated to give 2,8-dibromodibenzothiophene, that yielded by Heck coupling polymer P2. Both polymers are poly(p-phenylenevinylene) derivs. containing tetraphenylthiophene or dibenzothiophene moieties along the backbone. They dissolved readily in THF and chloroform with glass-transition temps. lower than 80°. The solns. of polymers emitted greenish light with photoluminescence (PL) maximum at 460-480 nm. The PL quantum yields in solution were 0.24 for P1 and 0.52 for P2. Thin films of polymers emitted bluish-green light with PL maximum near 510 nm and optical energy gap about 2.50 eV. P1 displayed lower tendency to form aggregates than P2. The cyclic voltammograms of polymers showed an irreversible oxidation and no reduction peaks, suggesting that electron transport through the polymers was very poor. Both single and bilayer LEDs of P2 exhibited low current densities with turn-on voltage at 6-7 V, while the electroluminescence (EL) was not measurable.
IT 700843-18-1P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(synthesis and optical properties of poly(phenylenevinylene)s bearing tetraphenylthiophene or dibenzothiophene moieties along the main chain)
RN 700843-18-1 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene-1,2-ethenediyl[2,5-bis(dodecyloxy)-1,4-phenylene]-1,2-ethenediyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 76 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 77 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:220435 CAPLUS
DOCUMENT NUMBER: 140:262427
TITLE: Organic species that facilitate charge transfer to or from nanostructures
INVENTOR(S): Whiteford, Jeffery A.; Buretea, Mihai A.; Scher, Erik C.
PATENT ASSIGNEE(S): Nanosys, Inc., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 7
PATENT INFORMATION:

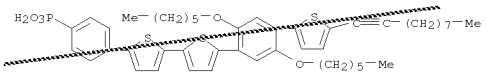
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004022714 | A2 | 20040318 | WO 2003-US27847 | 20030904 |
| WO 2004022714 | A3 | 20050414 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2497451 | A1 | 20040318 | CA 2003-2497451 | 20030904 |
| AU 2003272275 | A1 | 20040329 | AU 2003-272275 | 20030904 |
| EP 1537187 | A2 | 20050608 | EP 2003-754451 | 20030904 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1688670 | A | 20051026 | CN 2003-824336 | 20030904 |
| JP 2006511634 | T | 20060406 | JP 2004-534640 | 20030904 |
| US 2007122101 | A1 | 20070531 | US 2006-342087 | 20060126 |
| US 7228050 | B2 | 20070605 | | |

| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | US 2002-408722P | P | 20020905 |
| | US 2003-452232P | P | 20030304 |
| | US 2003-656916 | A1 | 20030904 |
| | WO 2003-US27847 | W | 20030904 |

AB The present invention provides compns. (small mols., oligomers and polymers) that can be used to modify charge transport across a surface or a nanostructure (e.g., nanocrystal) surface, or within a nanostructure (e.g., nanocrystal)containing matrix, as well as methods for making and using the novel compns. The compns. contain a conjugated organic species and at least one binding group capable of interacting with a nanostructure (e.g., nanocrystal) surface; during use, the compns. are coupled via the binding group to the nanostructure (e.g., nanocrystal) surface, such that the compns. are substantially conductive to electrons and/or holes being transported by/through the nanostructure (e.g., nanocrystal) (e.g., during the process of extg. or injecting the electrons or holes). The compns. of the present invention can optionally be derivatized with addnl. chem. groups, e.g., to enhance the electronic conjugation of the core org. species, to couple adjacent nanostructures (e.g., nanocrystals), or to facilitate dispersion, mixing and/or blending of nanostructures (e.g., nanocrystals) in various matrixes. In one aspect, the present invention provides conductive compns. for modification of charge transport across a nanostructure (e.g., nanocrystal)contg. matrix. The conductive compn. typically include (1) a conjugated org. moiety as the body structure, or core of the conductive mol.; (2) a nanostructure (e.g., nanocrystal) binding head group coupled to the body structure at a 1st position on the conjugated org. moiety; and (3) a tail group coupled to the body structure at a 2nd position on the conjugated org. moiety. After formation of an exciton in the nanostructure (e.g., nanocrystal) contg. matrix, the conductive compn. facilitates the injection and/or extn. of charge (electron and/or hole) with respect to the attached nanostructure, thereby modifying charge transport across a nanostructure-contg. matrix.

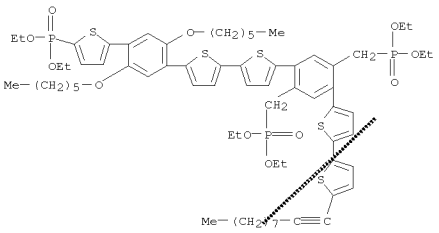
L19 ANSWER 77 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 671190-41-3P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(organic species that facilitate charge transfer to or from nanostructures)
RN 671190-41-3 CAPLUS
CN Phosphonic acid, [4-[5'-[4-[5-(1-decynyl)-2-thienyl]-2,5-bis(hexyloxy)phenyl][2,2'-bithiophen]-5-yl]phenyl]- (9CI) (CA INDEX NAME)



IT 671190-72-0P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(organic species that facilitate charge transfer to or from nanostructures)
RN 671190-72-0 CAPLUS
CN Phosphonic acid, [[2-[5'-(1-decynyl)[2,2'-bithiophen]-5-yl]-5-[5'-[4-[5-(diethoxyphosphinyl)-2-thienyl]-2,5-bis(hexyloxy)phenyl][2,2'-bithiophen]-5-yl]-1,4-phenylene]bis(methylene)]bis-, tetraethyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 77 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 78 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:220333 CAPLUS
DOCUMENT NUMBER: 140:270854
TITLE: Preparation of 1,3,8-triazaspiro[4.5]decan-4-ones for the treatment of ORL-1 receptor mediated disorders
INVENTOR(S): Battista, Kathleen; Bignan, Gilles; Connolly, Peter J.; Reitz, Allen B.; Morgan Ross, Tina; Scott, Malcolm; Middleton, Steve A.; Orsini, Michael
PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Belg.
SOURCE: PCT Int. Appl., 249 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004022558 | A2 | 20040318 | WO 2003-US27956 | 20030905 |
| WO 2004022558 | A3 | 20040521 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2498275 | A1 | 20040318 | CA 2003-2498275 | 20030905 |
| AU 2003268512 | A1 | 20040329 | AU 2003-268512 | 20030905 |
| US 2004142955 | A1 | 20040722 | US 2003-656934 | 20030905 |
| US 7081463 | B2 | 20060725 | | |
| BR 2003006309 | A | 20041019 | BR 2003-6309 | 20030905 |
| CN 1694883 | A | 20051109 | CN 2003-824990 | 20030905 |
| EP 1601674 | A2 | 20051207 | EP 2003-749479 | 20030905 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006500393 | T | 20060105 | JP 2004-534697 | 20030905 |
| MX 2005PA02622 | A | 20050908 | MX 2005-PA2622 | 20050309 |
| IN 2005KN00578 | A | 20060421 | IN 2005-KN578 | 20050406 |
| ZA 2005002836 | A | 20060628 | ZA 2005-2836 | 20050407 |
| NO 2005001743 | A | 20050518 | NO 2005-1743 | 20050408 |
| US 2006030577 | A1 | 20060209 | US 2005-242654 | 20051004 |
| IN 2007KN02550 | A | 20070824 | IN 2007-KN2550 | 20070709 |

PRIORITY APPLN. INFO.: US 2002-409134P P 20020909
US 2003-656934 A3 20030905
WO 2003-US27956 W 20030905
IN 2005-KN578 A3 20050406

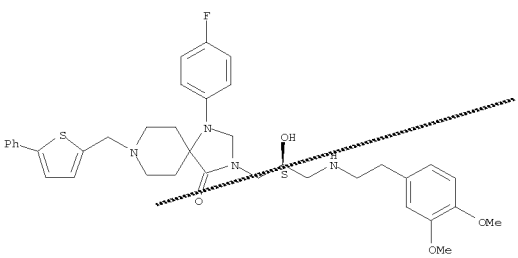
OTHER SOURCE(S): MARPAT 140:270854

L19 ANSWER 78 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R0 = CRaRbCOHRa-(CRcRd)1-3X, (CRcRd)1-3COHRaCRaRbX; Ra, Rb = H, alkyl; Rc, Rd = H, OH, carboxy, etc.; X = NR1R2, CONR1R2, NR1, etc.; R1, R2 = H, alkyl, alkoxy, etc.; R3 = aryl, arylalkyl, heteroaryl, etc.; A = (R4)n; R4 = OH, alkyl, alkyl-OH; n = 0-2; B = (L1)m; L1 = alkyl, alkenyl with provisos; m = 0-1; C = (R5)p and (R6)q substituted cycloalkyl, partially unsatd. carbocyclyl (sic), aryl, etc.; R5 = OH, carboxy, halo, etc.; p = 0-5; R6 = (L2)0-1R7; q = 0-1; L2 = alkyl, alkenyl, alkynyl, etc.; R7 = aryl, partially unsatd. carbocyclyl, cycloalkyl, etc.] and their pharmaceutically acceptable salts were prepared
For example, amination of epoxide II, e.g., prepared from cyclooctanecarboxaldehyde in 2-steps, with 4-aminopyridine afforded amino alc. III. In human ORL-1 receptor binding affinity assays, approx. 470-examples of compds. I exhibited IC50 values ranging from 0.10 - >10,000 nM, e.g., the IC50 value of triazaspiro[4.5]decan-4-one III was 8.73 nM. Compds. I are claimed useful for the treatment of anxiety, depression, migraine, etc..
IT 674466-48-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triazaspiro[4.5]decan-4-ones for the treatment of ORL-1 receptor mediated disorders)
RN 674466-48-9 CAPLUS
CN 1,3,8-Triazaspiro[4.5]decan-4-one, 3-[(2S)-3-[[2-(3,4-dimethoxyphenyl)ethyl]amino]-2-hydroxypropyl]-1-(4-fluorophenyl)-8-[(5-phenyl-2-thienyl)methyl]- (9CI) (CA INDEX NAME)

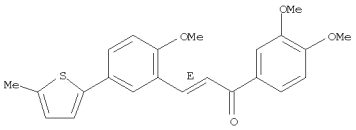
Absolute stereochemistry.



L19 ANSWER 78 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

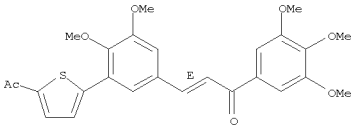
L19 ANSWER 79 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:189168 CAPLUS
DOCUMENT NUMBER: 140:399338
TITLE: Discovery of novel heteroaryl-substituted chalcones as
inhibitors of TNF-α-induced VCAM-1 expression
AUTHOR(S): Meng, Charles Q.; Zheng, X. Sharon; Ni, Liming; Ye, Zhihong; Simpson, Jacob E.; Worsencroft, Kimberly J.; Hotema, Martha R.; Weingarten, M. David; Skudlarek, Jason W.; Gilmore, Joshua M.; Moong, Lee K.; Hill, Russell R.; Marino, Elaine M.; Suen, Ki-Ling; Kunsch, Charles; Wasserman, Martin A.; Sikorski, James A.
CORPORATE SOURCE: AtheroGenics, Inc., Alpharetta, GA, 30004, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(6), 1513-1517
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:399338
AB Novel chalcone derivs. have been discovered as potent inhibitors of TNF-α-induced VCAM-1 expression. Thienyl or benzothienyl substitution at the meta-position of ring B helps boost potency while large substitution at the para-position on ring B is detrimental. Various
substitutions are tolerated on ring A. A lipophilicity-potency relationship has been observed for several sub-series of compds.
IT 690665-66-8 690665-67-9 690665-68-0
690665-69-1 690665-70-4
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(discovery and structure-activity relationship of novel heteroaryl-substituted chalcones as inhibitors of TNF-α-induced VCAM-1 expression)
RN 690665-66-8 CAPLUS
CN 2-Propen-1-one, 1-(3,4-dimethoxyphenyl)-3-[2-methoxy-5-(5-methyl-2-thienyl)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



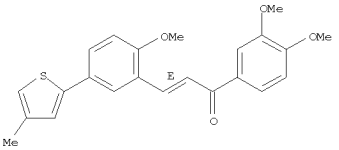
RN 690665-67-9 CAPLUS
CN 2-Propen-1-one, 1-(3,4-dimethoxyphenyl)-3-[2-methoxy-5-(4-methyl-2-thienyl)phenyl]-, (2E)- (9CI) (CA INDEX NAME)

L19 ANSWER 79 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



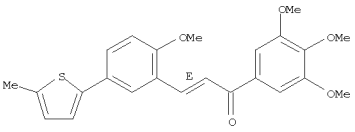
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 79 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Double bond geometry as shown.



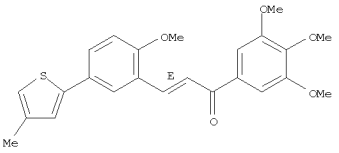
RN 690665-68-0 CAPLUS
CN 2-Propen-1-one, 3-[2-methoxy-5-(5-methyl-2-thienyl)phenyl]-1-(3,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 690665-69-1 CAPLUS
CN 2-Propen-1-one, 3-[2-methoxy-5-(4-methyl-2-thienyl)phenyl]-1-(3,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 690665-70-4 CAPLUS
CN 2-Propen-1-one, 3-[3-(5-acetyl-2-thienyl)-4,5-dimethoxyphenyl]-1-(3,4,5-trimethoxyphenyl)-, (2E)- (9CI) (CA INDEX NAME)

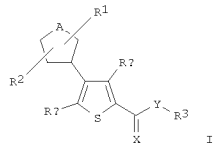
Double bond geometry as shown.

L19 ANSWER 80 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:181798 CAPLUS
DOCUMENT NUMBER: 140:217508
TITLE: Preparation of thiophenes as selective metalloproteinase MMP-12 inhibitors, as well as their pharmaceutical compositions for treating respiratory diseases
INVENTOR(S): Dublanchet, Anne-Claude; Compere, Delphine; Cluzeau, Philippe; Blais, Stephane
PATENT ASSIGNEE(S): Warner-Lambert Company LLC, USA
SOURCE: Eur. Pat. Appl., 111 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1394159 | A1 | 20040303 | EP 2002-292037 | 20020813 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| CA 2497632 | A1 | 20040318 | CA 2003-2497632 | 20030807 |
| WO 2004018448 | A1 | 20040304 | WO 2003-EP8750 | 20030807 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003251695 | A1 | 20040311 | AU 2003-251695 | 20030807 |
| EP 1534700 | A1 | 20050601 | EP 2003-792270 | 20030807 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003013734 | A | 20050712 | BR 2003-13734 | 20030807 |
| JP 2006504674 | T | 20060209 | JP 2004-530099 | 20030807 |
| US 2004072871 | A1 | 20040415 | US 2003-638016 | 20030808 |
| MX 2005PA01782 | A | 20050425 | MX 2005-PA1782 | 20050211 |
| PRIORITY APPLN. INFO.: | | | EP 2002-292037 A | 20020813 |
| | | | WO 2003-EP8750 W | 20030807 |

OTHER SOURCE(S): MARPAT 140:217508
GI

L19 ANSWER 80 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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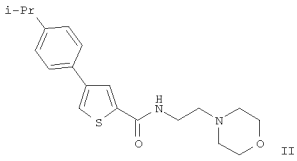


II

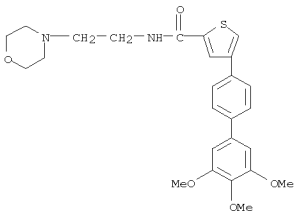
AB Title compds. I [wherein X = O or S; Y = O, NH and derivs.; Ra = H, halo, alkyl, hydroxy, alkoxy; Rb = H, halo, alkyl; A = Ph, cycloakyl, cycloalkenyl; R1, R2 = independently H, halo, CN, NO2, haloalkyl, haloalkoxy, alk(en/yn)yl, OH and derivs., NH2 and derivs., S(O)nH and derivs., CO2H and derivs., CONH2 and derivs., NHSO2H and derivs., etc.; n = 0-2; R3 = H, alkyl, (un)substituted cycloalkyl aryl, heterocyclyl, etc.; and their isomers, pharmaceutically acceptable salts of addition with an acid or base] were prepared as metalloproteinase MMP-12 inhibitors for treating respiratory diseases. For example, II was prepared, in 3 steps, by oxidation of 4-bromothiophene-2-carboxaldehyde, acylation of 2-morpholin-4-ylethanamine with thiophene carboxylic acid, followed by Pd-cross coupling of the bromothiophene intermediate with (4-isopropylphenyl)boronic acid. I selectively inhibited MMP-12 in vitro with an IC50 value < 5 μM. Thus, I and their formulations are useful for treating obstructive pulmonary diseases, emphysema, asthma, chronic bronchitis, etc.

IT 666722-16-3P, 4-[4-(3,4,5-Trimethoxyphenyl)phenyl]-N-[2-(morpholin-4-yl)ethyl]thiophene-2-carboxamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

L19 ANSWER 80 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(MMP-12 inhibitor; prepn. of thiophenes as selective MMP-12 inhibitors, for treating pulmonary diseases)

RN 666722-16-3 CAPLUS

CN 2-Thiophenecarboxamide, N-[2-(4-morpholinyl)ethyl]-4-(3',4',5'-trimethoxy[1,1'-biphenyl]-4-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 81 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:100823 CAPLUS

DOCUMENT NUMBER: 140:163704

TITLE: Preparation of arylsulfonylpyranhydroxamates as matrix metalloprotease and/or aggrecanase inhibitors

INVENTOR(S): Freskos, John N.; Fobian, Yvette M.; Awasthi, Alok K.; Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.; Boehm, Terri L.; Carroll, Jeffery N.; Chandrakumar, Nizal S.; Decrescenzo, Gary A.; Desai, Bipin N.; Heron, Marcia I.; Hockerman, Susan L.; Jull, Sara M.; Kassab, Darren J.; Kolodziej, Steve A.; McDonald, Joseph; Mischke, Deborah A.; Mullins, Patrick B.; Norton, Monica B.; Rico, Joseph G.; Talley, John J.; Trivedi, Mahima; Villamil, Clara I.; Wang, Lijuan Jane

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 365 pp., Cont.-in-part of U.S. Ser. No. 142,737.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2004024024 | A1 | 20040205 | US 2002-291983 | 20021112 |
| US 2004010019 | A1 | 20040115 | US 2002-142737 | 20020510 |
| US 6689794 | B2 | 20040210 | | |
| US 2004110805 | A1 | 20040610 | US 2003-657034 | 20030905 |
| US 6890928 | B2 | 20050510 | | |
| CA 2504737 | A1 | 20040527 | CA 2003-2504737 | 20031103 |
| WO 2004043943 | A1 | 20040527 | WO 2003-US34961 | 20031103 |
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| RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2003290583 | A1 | 20040603 | AU 2003-290583 | 20031103 |
| EP 1562928 | A1 | 20050817 | EP 2003-783118 | 20031103 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| BR 2003016133 | A | 20050927 | BR 2003-16133 | 20031103 |
| JP 2006508964 | T | 20060316 | JP 2004-551679 | 20031103 |
| US 2005101641 | A1 | 20050512 | US 2004-992483 | 20041117 |
| MX 2005PA05047 | A | 20050701 | MX 2005-PA5047 | 20050511 |

PRIORITY APPLN. INFO.: US 2001-290375P P 20010511
US 2002-142737 A2 20020510
US 2002-291983 A 20021112
US 2003-657034 A3 20030905
WO 2003-US34961 W 20031103

L19 ANSWER 81 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

OTHER SOURCE(S): MARPAT 140:163704

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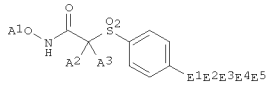


I

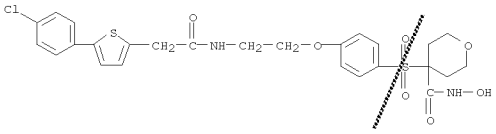
AB Title compds. [I; A1 = H, (substituted) alkylcarbonyl, alkoxycarbonyl, carbocyclylcarbonyl, heterocyclylcarbonyl, aminoalkylthiocarbonyl, etc.; A2A3C = (substituted) heterocyclyl; E1 = O, S, SO, SO2, NR1, CONR1, CR1R2; E2 = (substituted) alkyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, alkylcycloalkylalkyl; E3 = CO, O2C, CNR3, NR4, NR4SO2, S, SO, etc.; E4 = bond, (substituted) alkyl, alkenyl; E5 = H, OH, (substituted) alkyl, alkenyl, alkynyl, alkoxy, alkoxyalkyl, carbocyclyl, heterocyclyl; R1, R2 = H, (substituted) alkyl; R4 = H, alkyl, cycloalkyl, etc.; with provisos], were prepared Thus, tetrahydro-4-[[4-[[5-(4-methoxyphenyl)-5-oxopentyl]oxy]phenyl]sulfonyl]-2H-pyran-4-carboxylic acid 1,1-dimethylethyl ester (preparation given) in CH2Cl2 was treated with Me3SiCN and ZnI2 to give 81% cyanohydrin. The product in DMF was treated with 1-hydroxybenzotriazole, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride, N-methylmorpholine, and tetrahydropyranhydroxylamine to give 70% THP-protected hydroxamate. The latter was stirred with aqueous HCl in dioxane/MeOH to give 59% 4-[[4-[[(4Z)-5-cyano-5-(4-methoxyphenyl)-4-pentenyl]oxy]phenyl]sulfonyl]tetrahydro-N-hydroxy-2H-pyran-4-carboxamide. This inhibited MMP-13 with IC50 = 0.2 nM.

IT 476183-89-8P 476186-47-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of arylsulfonylpyranhydroxamates as matrix metalloprotease and/or aggrecanase inhibitors)

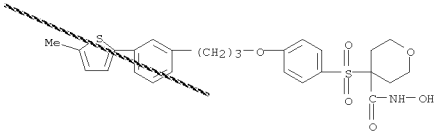
RN 476183-89-8 CAPLUS

CN 2H-Pyran-4-carboxamide, 4-[[4-[2-[[[5-(4-chlorophenyl)-2-thienyl]acetyl]amino]ethoxy]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

L19 ANSWER 81 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



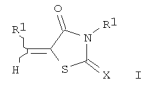
RN 476186-47-7 CAPLUS
CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[[4-[3-[3-(5-methyl-2-thienyl)phenyl]propoxy]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



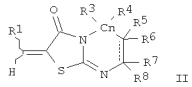
L19 ANSWER 82 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:3668 CAPLUS
DOCUMENT NUMBER: 140:89899
TITLE: Thiazolidinone phospholipase D inhibitors and their use as antitumor and antiinflammatory agents
INVENTOR(S): Klein, J. Peter; Kumar, Anil M.; Mckennon, Marc J.
PATENT ASSIGNEE(S): Cell Therapeutics, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 32 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 2004002526 | A1 | 20040101 | US 2003-405059 | 20030401 |
| PRIORITY APPLN. INFO.: | | | US 2002-369719P | P 20020403 |

OTHER SOURCE(S): MARPAT 140:89899
GI



I

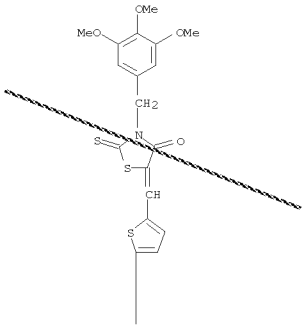


II

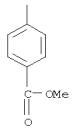
AB The invention is directed to thiazolidinones (I; R1 = H, alkyl, alkenyl, aryl, heteroaryl; R2 = H, alkyl, cycloalkyl, heteroalicyclic, aryl, arylalkyl, arylalkenyl; X = O, S; II; R1 = alkenyl, aryl, heteroaryl; R3,R4 = H, alkyl, aryl; R5-8 = H, alkyl, acyl, aryl; or R5 and R7 combined = aryl, heteroaryl, cycloalkyl, heteroalicyclic; n = 0-2) and their use to inhibit phospholipase D (PLD) activity. The invention further relates to methods of treating cancer and inflammatory diseases using thiazolidinones. Thus, many I and II compds. were synthesized. These were tested for phospholipase D inhibition in vitro and in intact cells. One such phospholipase D inhibitor at 10 μM inhibited proliferation of H-ras transformed Rat1 cells and at 25 μM significantly inhibited formation of colonies by human pancreatic tumor cells MiaPaCa and Panc1.

L19 ANSWER 82 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Addnl., administration of this compd. i.p. to nude mice injected with Ki-ras expressing NIH/3T3 cells delayed tumor growth.
IT 639816-30-1P
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(thiazolidinone phospholipase D inhibitors and their use as antitumor and antiinflammatory agents)
RN 639816-30-1 CAPLUS
CN Benzoic acid, 4-[5-[[4-oxo-2-thioxo-3-[(3,4,5-trimethoxyphenyl)methyl]-5-thiazolidinylidene]methyl]-2-thienyl]-, methyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L19 ANSWER 83 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:950770 CAPLUS
DOCUMENT NUMBER: 140:4842
TITLE: Bis-aromatic alkanols
INVENTOR(S): Fan, Ying; Gao, Wenqi; Gray, Nathanael S.; Hinterding, Klaus; Lefebvre, Sophie; Mi, Yuan; Nussbaumer, Peter; Pan, Shifeng; Wang, Wei; Zecri, Frederic; Perez, Lawrence Blas; La Montagne, Kenneth Richard; Ettmayer, Peter
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.; IRM LLC
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

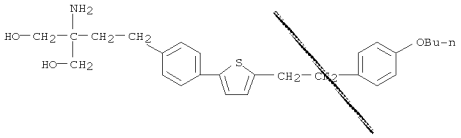
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003099192 | A2 | 20031204 | WO 2003-EP5510 | 20030526 |
| WO 2003099192 | A3 | 20040318 | | |
| WO 2003099192 | A8 | 20050217 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW | | | | |
| RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | | |
| CA 2486853 | A1 | 20031204 | CA 2003-2486853 | 20030526 |
| AU 2003240714 | A1 | 20031212 | AU 2003-240714 | 20030526 |
| BR 2003011347 | A | 20050222 | BR 2003-11347 | 20030526 |
| EP 1511473 | A2 | 20050309 | EP 2003-730117 | 20030526 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1655774 | A | 20050817 | CN 2003-812108 | 20030526 |
| JP 2005527612 | T | 20050915 | JP 2004-506719 | 20030526 |
| NZ 536558 | A | 20060728 | NZ 2003-536558 | 20030526 |
| US 2004048857 | A1 | 20040311 | US 2003-445967 | 20030527 |
| US 7169817 | B2 | 20070130 | | |
| PRIORITY APPLN. INFO.: | | | GB 2002-12210 | A 20020527 |
| | | | GB 2002-26624 | A 20021114 |
| | | | US 2002-432704P | P 20021210 |
| | | | WO 2003-EP5510 | W 20030526 |

AB A compound of R1XYC(NR3R4)R2CR5 useful for pharmaceutical compns. is prepared wherein Y is -CH2CH2-, -CH2CH(OH)-, -CH(OH)CH2-, -C(O)CH2-, -CH2C(O)-, -CH:CH-, or 1,2-cyclopropylene; X is arylene or C5-6 heteroarylene, R1 is aryl, aryl-C2-4 alkenyl, heteroaryl, or heteroaryl-C2-4 alkenyl; R2 is hydrogen, halogen, C1-4 alkyl, C2-6 alkenyl, C2-6 alkynyl, cycloalkyl, or aryl; each of R3 and R4 is H or C1-4 alkyl; and R5 is H, -OH, -Oacyl,

L19 ANSWER 83 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
-NHacyl etc. Thus, 6.9 g (2R,5R)-2-[2-(4-benzyloxyphenyl)ethyl]-3,6-diethoxy-5-isopropyl-2-methyl-2,5-dihydropyrazine was treated with 5.17 g tert-butoxycarbonyl anhydride to give Et
(R)-4-(4-benzyloxyphenyl)-2-tert-butoxycarbonylamino-2-methylbutyrate, which (2.78 g) was treated with 1,3 mL trifluoromethanesulfonic anhydride to give Et (R)-2-tert-

butoxycarbonylamino-2-methyl-4-(4-trifluoromethanesulfonyloxyphenyl)butyrate, which (100 mg) was treated with 75 mg butylboronic acid to give Et

(R)-2-tert-butoxycarbonylamino-4-(4'-butylbiphenyl-4-yl)-2-methylbutyrate, which (22 mg) was treated with 20 mg lithium borohydride to give (R)-2-amino-4-(4'-butylbiphenyl-4-yl)-2-methylbutan-1-ol.
IT 628735-17-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and characterization of)
RN 628735-17-1 CAPLUS
CN 1,3-Propanediol, 2-amino-2-[2-[4-[5-[2-(4-butoxyphenyl)ethyl]-2-thienyl]phenyl]ethyl]- (9CI) (CA INDEX NAME)

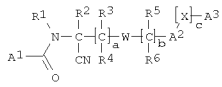


L19 ANSWER 84 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:931161 CAPLUS
DOCUMENT NUMBER: 140:4955
TITLE: Preparation of N-acylaminoacetonitriles for controlling parasites
INVENTOR(S): Ducray, Pierre; Goebel, Thomas; Bouvier, Jacques; Durano, Corinne
PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma Gmbh
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003097036 | A1 | 20031127 | WO 2003-EP5334 | 20030521 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW | | | | |
| RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR | | | | |
| CA 2483286 | A1 | 20031127 | CA 2003-2483286 | 20030521 |
| AU 2003242555 | A1 | 20031202 | AU 2003-242555 | 20030521 |
| BR 2003011214 | A | 20050301 | BR 2003-11214 | 20030521 |
| EP 1509221 | A1 | 20050302 | EP 2003-752774 | 20030521 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| CN 1649579 | A | 20050803 | CN 2003-809965 | 20030521 |
| US 2005182127 | A1 | 20050818 | US 2003-513806 | 20030521 |
| JP 2005536466 | T | 20051202 | JP 2004-505035 | 20030521 |
| NZ 536184 | A | 20061027 | NZ 2003-536184 | 20030521 |
| ZA 2004007974 | A | 20060726 | ZA 2004-7974 | 20041004 |
| MX 2004PA11531 | A | 20050214 | MX 2004-PA11531 | 20041119 |
| PRIORITY APPLN. INFO.: | | | CH 2002-855 A | 20020522 |
| | | | WO 2003-EP5334 W | 20030521 |

OTHER SOURCE(S): MARPAT 140:4955
GI

L19 ANSWER 84 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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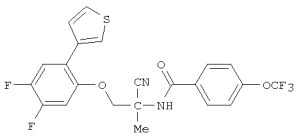
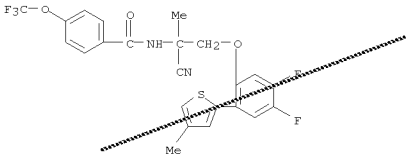


II

AB The title compds. [I; A1, A2 = (un)substituted aryl, heteroaryl, etc.; A3 = (un)substituted pyrimidyl, s-triazinyl, 1,2,4-triazinyl, etc.; R1 = H, alkyl, haloalkyl, allyl, alkoxymethyl; R2-R6 = H, halo, alkyl, etc.; or R2
and R3 are jointly alkylene; W = O, S, SO2, NR7; X = O, S, NR7; R7 = H, alkyl; a = 1-4; b = 0-4; c = 0-1] which have advantageous pesticidal properties, and are particularly suitable for controlling parasites in warm-blooded animals, were prepared and formulated. E.g.,a multi-step synthesis of the benzamide II, starting from chloroacetone and 2-bromo-4,5-difluorophenol, was given.
IT 627881-36-1P
RL: AGR (Agricultural use); BSU (Biological study, unclassified); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-acylaminoacetonitriles for controlling parasites)
RN 627881-36-1 CAPLUS
CN Benzamide, N-[1-cyano-2-[4,5-difluoro-2-(4-methyl-2-thienyl)phenoxy]-1-methylethyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:844737 CAPLUS
DOCUMENT NUMBER: 140:61046
TITLE: Controlling solubility and modulating peripheral function in dendrimer encapsulated dyes
AUTHOR(S): Furuta, Paul; Frechet, Jean M. J.
CORPORATE SOURCE: Department of Chemistry, University of California, Berkeley, CA, 94720-1460, USA
SOURCE: Journal of the American Chemical Society (2003), 125(43), 13173-13181
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:61046

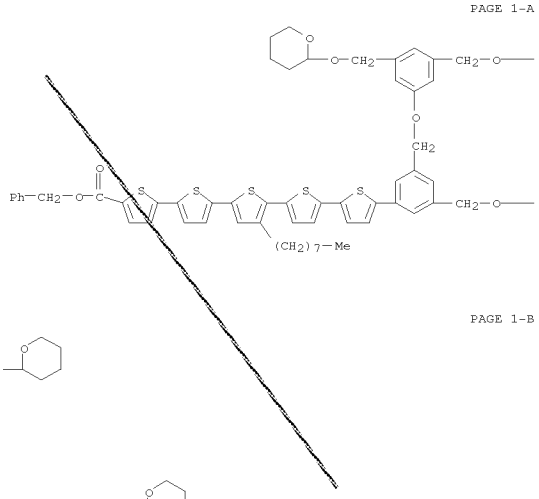
AB The synthesis of large dendrons and dendrimers with site-isolated dyes at their core has been explored. The dyes selected for this work were coumarin 343 and pentathiophene, as energy transfer processes prevail when the two dyes are intimately mixed but each should behave independently of the other if site-isolation is achieved. Because the two dyes have very different functional characteristics, a protocol involving orthogonal protecting groups and allowing the use of a single family of electroactive dendrons for their encapsulation had to be developed. The synthetic protocol must balance the need to incorporate electroactive groups at the periphery of the dendrons with the requirement for high solubility and a size sufficient to fully encapsulate the central dye. Because of their poor solubility and tendency to crystallize, dendrons with uniform triarylamine substitution proved unsatisfactory leading to the development of new unsym. dendrons with alternating branched alkyl groups and triarylamine moieties at their periphery. These dendrons, which show excellent solubility and no tendency to crystallize, were assembled into large dendrimers using a modular protocol with the light emitting dye at their core. It is expected that the large size of the dendritic shell will provide effective site-isolation for the encapsulated central dyes enabling them to exhibit their intrinsic emission properties with minimal energy transfer between neighboring core fluorophores when processed in bulk thin films.

IT 636984-43-5P 636984-44-6DP, reaction products with benzyl-terminated dihydroxybenzylbromide dendrimers 636984-44-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(controlling solubility and modulating peripheral function in dendrimer encapsulated light emitting dyes)

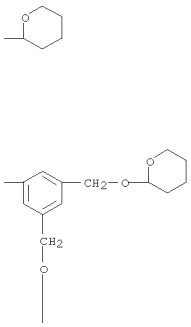
RN 636984-43-5 CAPLUS
CN [2,2':5',2'':5'',2''':5''',2''''-Quinquethiophene]-5-carboxylic acid, 5''''-[3,5-bis[[3,5-bis[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenoxy]methyl]phenyl]-4''-octyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

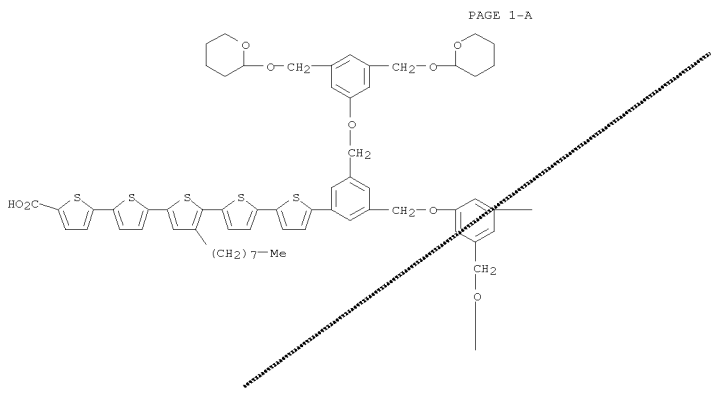


L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B

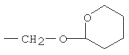
RN 636984-44-6 CAPLUS
CN [2,2':5',2'':5'',2''':5''',2''''-Quinquethiophene]-5-carboxylic acid, 5''''-[3,5-bis[[3,5-bis[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenoxy]methyl]phenyl]-4''-octyl- (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

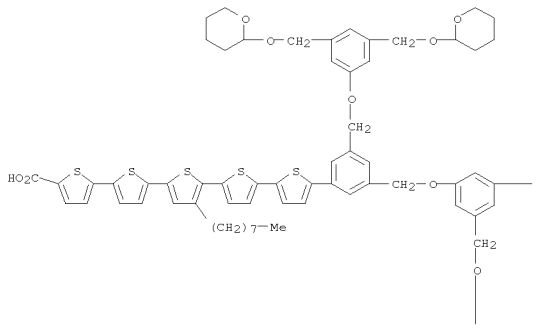


PAGE 2-A

RN 636984-44-6 CAPLUS
CN [2,2':5',2'':5'',2''':5''',2''''-Quinquethiophene]-5-carboxylic acid, 5''''-[3,5-bis[[3,5-bis[[(tetrahydro-2H-pyran-2-yl)oxy]methyl]phenoxy]methyl]phenyl]-4''-octyl- (9CI) (CA INDEX NAME)

L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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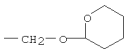
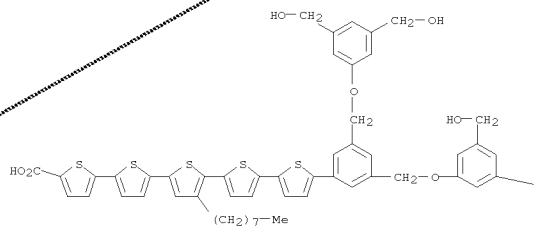


L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

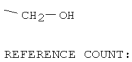
IT 637357-29-0DP, reaction products with naphthylphenylamine-terminated dihydroxybenzyl bromide dendrimers
RL: SPN (Synthetic preparation); PREP (Preparation)
(controlling solubility and modulating peripheral function in dendrimer
encapsulated light emitting dyes)
RN 637357-29-0 CAPLUS
CN [2,2':5',2'':5'',2''':5''',2''''-Quinquethiophene]-5-carboxylic acid, 5''''-[3,5-bis[[3,5-bis(hydroxymethyl)phenoxy]methyl]phenyl]-4''-octyl- (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 85 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 86 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

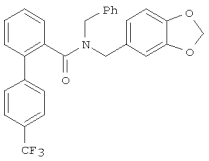
ACCESSION NUMBER: 2003:796665 CAPLUS
DOCUMENT NUMBER: 139:307607
TITLE: Preparation of substituted biaryl amides as C5a receptor modulators
INVENTOR(S): Gao, Yang; Hutchison, Alan; Peterson, John; Pringle, Wallace; Thurkauf, Andrew; Yoon, Taeyoung; Zhao, He
PATENT ASSIGNEE(S): Neurogen Corporation, USA
SOURCE: PCT Int. Appl., 144 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003082826 | A1 | 20031009 | WO 2003-US9045 | 20030325 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2479928 | A1 | 20031009 | CA 2003-2479928 | 20030325 |
| AU 2003225971 | A1 | 20031013 | AU 2003-225971 | 20030325 |
| EP 1487796 | A1 | 20041222 | EP 2003-745585 | 20030325 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2006502095 | T | 20060119 | JP 2003-580294 | 20030325 |
| US 2004048913 | A1 | 20040311 | US 2003-401270 | 20030327 |
| US 6858637 | B2 | 20050222 | | |
| US 2005096358 | A1 | 20050505 | US 2004-994224 | 20041119 |
| US 7148225 | B2 | 20061212 | | |
| US 2006178414 | A1 | 20060810 | US 2006-324729 | 20060103 |

| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | US 2002-368462P | P | 20020328 |
| | US 2002-372150P | P | 20021204 |
| | WO 2003-US9045 | W | 20030325 |
| | US 2003-401270 | A1 | 20030327 |
| | US 2004-994224 | A1 | 20041119 |

OTHER SOURCE(S): MARPAT 139:307607
GI

L19 ANSWER 86 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



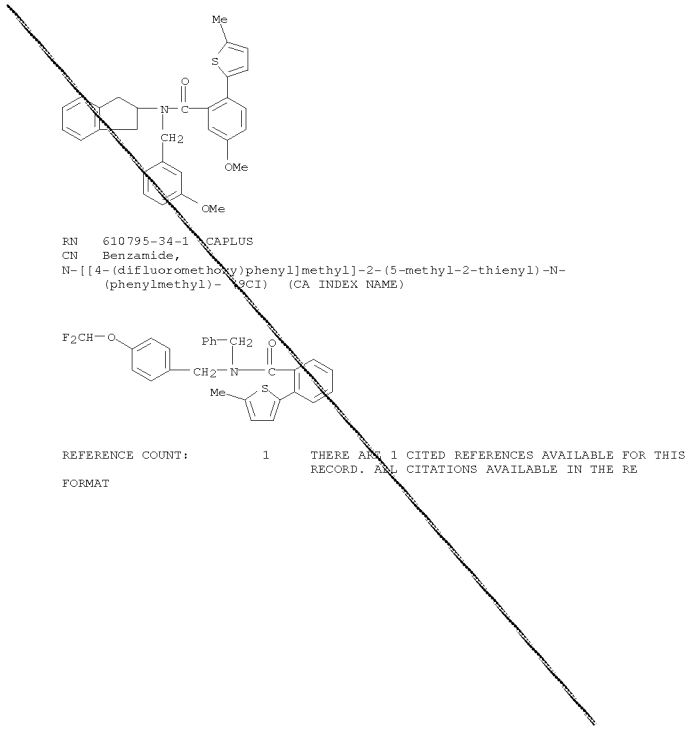
I

AB The title compds. Ar1CONR1R2 [Ar1 = (un)substituted Ph, 9H-fluorenyl, naphthyl, heteroaryl; R1 = (un)substituted cycloalkyl, (cycloalkyl)alkyl, (heteroaryl)alkyl, etc.; R2 = alkyl, cycloalkyl, aryl, etc.] which are ligands that may be used to modulate C5a receptor activity in vivo or in vitro, and are particularly useful in the treatment of conditions associated with pathol. C5a receptor activation in humans, domesticated companion animals and livestock animals, were prepared and formulated. Thus, treating 2-iodobenzoic acid with 1,1'-carbonyldiimidazole followed by addition of N-(3,4-methylenedioxybenzyl)-N-benzylamine, and coupling of the resulting intermediate with 4-trifluoromethylphenylboronic acid in the presence of Pd(PPh3)4 afforded I. Preferred compds. exhibit IC50 values of less than 1 μM in the assay for C5a receptor mediated chemotaxis. Pharmaceutical compns. and methods for using them to treat such mentioned above disorders are provided, as are methods for using such ligands for receptor localization studies.

IT 610794-89-3P 610795-34-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of biaryl amides as C5a receptor modulators)

RN 610794-89-3 CAPLUS
CN Benzamide, N-(2,3-dihydro-1H-inden-2-yl)-5-methoxy-N-[(3-methoxyphenyl)methyl]-2-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 86 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 610795-34-1 CAPLUS
CN Benzamide, N-[[4-(difluoromethoxy)phenyl]methyl]-2-(5-methyl-2-thienyl)-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

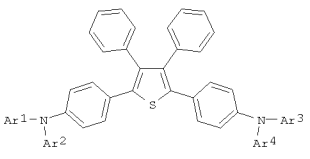
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 87 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:750705 CAPLUS
DOCUMENT NUMBER: 139:267732
TITLE: Organic electroluminescent devices showing stable and bright emission and arylaminophenylthiophene derivatives therefor
INVENTOR(S): Shimamura, Takehiko; Tanabe, Yoshimitsu; Ishida, Tsutomu; Totani, Yoshiyuki; Nakatsuka, Masakatsu
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003267973 | A | 20030925 | JP 2002-74286 | 20020318 |
| PRIORITY APPLN. INFO.: | | | JP 2002-74286 | 20020318 |

OTHER SOURCE(S): MARPAT 139:267732
GI



I

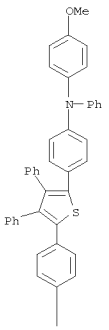
AB Arylaminophenylthiophene derivs. I [Ar1-Ar4 = aryl where ≥1 of them is anthryl) and organic electroluminescent devices having I in hole-injecting or emission layers and exhibiting the mentioned advantages are both claimed.

IT 603132-56-5P 603132-57-6P
RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
(novel arylaminophenylthiophene derivs. for organic electroluminescent devices showing stable and bright emission)

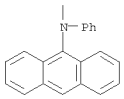
RN 603132-56-5 CAPLUS
CN 9-Anthracenamine, N-[4-[5-[4-[(4-methoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 87 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

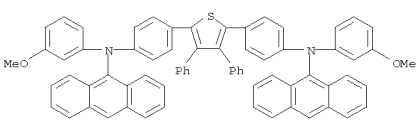
PAGE 1-A



PAGE 2-A



RN 603132-57-6 CAPLUS
CN 9-Anthracenamine, N,N'-[(3,4-diphenyl-2,5-thiophenediyl)di-4,1-phenylene]bis[N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 88 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:675790 CAPLUS
DOCUMENT NUMBER: 139:221357
TITLE: Organic electroluminescent component with thiophene derivative
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003243176 | A | 20030829 | JP 2002-38422 | 20020215 |
| JP 3788603 | B2 | 20060621 | | |
| PRIORITY APPLN. INFO.: | | | JP 2002-38422 | 20020215 |

OTHER SOURCE(S): MARPAT 139:221357
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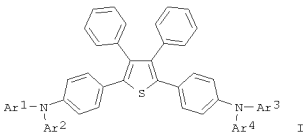
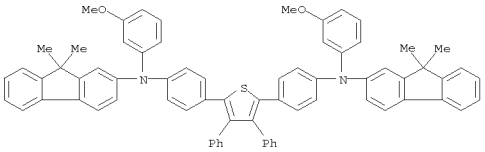


I

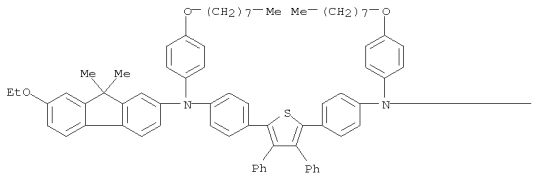
AB The invention refers to an organic electroluminescent component comprising a thiophene derivative I [Ar1-4 = (un)substituted aryl; and Ar1 and Ar2, Ar3 and Ar4 may join to form N-containing rings, and at least one of Ar1-4 must be a(n) (un)substituted fluorenyl].
IT 586964-18-3 586964-19-4
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component with thiophene derivative)
RN 586964-18-3 CAPLUS
CN 9H-Fluoren-2-amine, N,N'-[(3,4-diphenyl-2,5-thiophenediyl)di-4,1-phenylene]bis[N-(3-methoxyphenyl)-9,9-dimethyl- (9CI) (CA INDEX NAME)

L19 ANSWER 88 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 586964-19-4 CAPLUS
CN 9H-Fluoren-2-amine, N,N'-[(3,4-diphenyl-2,5-thiophenediyl)di-4,1-phenylene]bis[7-ethoxy-9,9-dimethyl-N-[4-(octyloxy)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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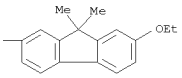
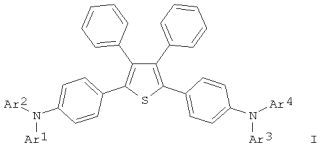


L19 ANSWER 89 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:673858 CAPLUS
DOCUMENT NUMBER: 139:214323
TITLE: Preparation of 2,5-bis(4-aminophenyl)-3,4-diphenylthiofuran derivatives as positive hole injection transport materials for organic electroluminescent devices
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003238559 | A | 20030827 | JP 2002-31611 | 20020208 |
| PRIORITY APPLN. INFO.: | | | JP 2002-31611 | 20020208 |

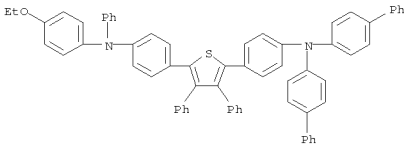
OTHER SOURCE(S): MARPAT 139:214323
GI



I

AB The title compds. [I; Ar1, Ar2 = (un)substituted biphenyl; Ar3, Ar4 = (un)substituted Ph] are prepared Thus, 2,5-bis(4-iodophenyl)-3,4-diphenylthiophene 64, N,N-bis(4-phenylphenyl)amine 32, copper powder 10, and anhydrous K2CO3 20 g were stirred in 200 g o-chlorobenzene at 190° for 8 h, cooled to 100°, filtered, and treated with 400 g methanol followed by filtration of the precipitated crystals, drying, and alumina chromatog. to give 32 g 2-[4-[N,N-bis(4-phenylphenyl)amino]phenyl]-5-(4-iodophenyl)-3,4-diphenylthiophene (II). II 8.3, N,N-diphenylamine 2.0, and anhydrous K2CO3 5.0 g were stirred in 50 g o-chlorobenzene at 190° for 8 h, processed similarly as described above to give, after purification by sublimation at 270° and 10-6 torr, 6.2 g 2-[4-[N,N-bis(4-phenylphenyl)amino]phenyl]-5-[4-(N,N-diphenylamino)phenyl]-3,4-diphenylthiophene (III) as light yellow solid (glass transition temperature 127°). An electroluminescent device with a hole injection layer of III vapor-deposited on a ITO electrode emitted green light at 50°, 6.5 V, 10 mA/cm2, and luminance of 460 cd/m2 with a half life of 740 h.

L19 ANSWER 89 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 404389-98-6P
RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of bis(p-aminophenyl)diphenylthiofuran derivs. as pos. hole injection transport materials for organic electroluminescent devices)
RN 404389-98-6 CAPLUS
CN [1,1'-Biphenyl]-4-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[(4-ethoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 90 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:671094 CAPLUS
DOCUMENT NUMBER: 139:214329
TITLE: Preparation of 2,5-bis(4-aminophenyl)-3,4-diphenylthiofuran derivatives as positive hole injection transport materials for organic electroluminescent devices
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003238560 | A | 20030827 | JP 2002-36873 | 20020214 |
| PRIORITY APPLN. INFO.: | | | JP 2002-36873 | 20020214 |

OTHER SOURCE(S): MARPAT 139:214329
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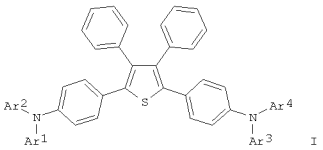
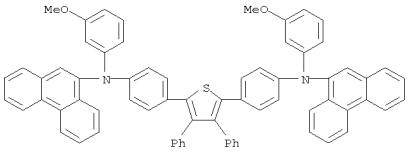


AB The title compds. [I; Ar1-Ar4 = (un)substituted aryl; or Ar1 and Ar2 or Ar3 and Ar4 together with the N atom to which they are bonded form a N-containing heterocyclic ring; provided that at least one of Ar1-Ar4 is (un)substituted phenanthryl] are prepared Thus, 2,5-bis(4-iodophenyl)-3,4-diphenylthiophene 64, N-(9-phenanthryl)-N-phenylamine 27, copper powder 10, and anhydrous K2CO3 20 g were stirred in 200 g o-chlorobenzene at 190° for 8 h, cooled to 100°, filtered, and treated with 400 g methanol followed by filtration of the precipitated crystals, drying, and alumina chromatog. to give 32 g 2-[4-[N-(9-phenanthryl)-N-phenylamino]phenyl]-5-(4-iodophenyl)-3,4-diphenylthiophene (II). II 7.8, N,N-diphenylamine 2.0, and anhydrous K2CO3 5.0 g were stirred in 30 g o-chlorobenzene at 190° for 8 h, processed similarly as described above to give, after purification by sublimation at 300° and 10-6 torr, 5.8 g 2-[4-[N-(9-phenanthryl)-N-phenylamino]phenyl]-5-[4-(N,N-

L19 ANSWER 90 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
diphenylamino)phenyl]-3,4-diphenylthiophene (III) as yellow solid (glass transition temp. 128°). An electroluminescent device with a hole injection layer of III vapor-deposited on a ITO electrode emitted green light at 50°, 6.5 V, 10 mA/cm2, and luminance of 470 cd/m2 with a half life of 760 h.
IT 587848-11-1P
RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of (p-phenanthrylaminophenyl)(aminophenyl)diphenylthiofuran derivs. as pos. hole injection transport materials for organic electroluminescent devices)
RN 587848-11-1 CAPLUS
CN 9-Phenanthrenamine, N,N'-[(3,4-diphenyl-2,5-thiophenediyl)di-4,1-phenylene]bis[N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 91 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:671093 CAPLUS
DOCUMENT NUMBER: 139:214320
TITLE: Preparation of 2,5-bis(4-aminophenyl)-3,4-diphenylthiofuran derivatives as positive hole injection transport materials for organic electroluminescent devices
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003238557 | A | 20030827 | JP 2002-31609 | 20020208 |
| PRIORITY APPLN. INFO.: | | | JP 2002-31609 | 20020208 |

OTHER SOURCE(S): MARPAT 139:214320
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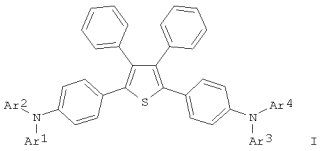
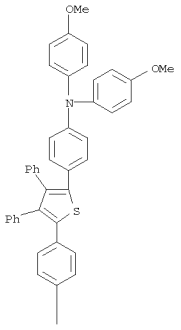


AB The title compds. [I; Ar1, Ar2 = (un)substituted naphthyl; Ar3, Ar4 = (un)substituted Ph] are prepared Thus, 2,5-bis(4-iodophenyl)-3,4-diphenylthiophene 64, N,N-bis(1-naphthyl)amine 27, copper powder 10, and anhydrous K2CO3 20 g were stirred in 200 g o-chlorobenzene at 190° for 8 h, cooled to 100°, filtered, and treated with 400 g methanol followed by filtration of the precipitated crystals, drying, and alumina chromatog., 30 g 2-[4-[N,N-di(1-naphthyl)amino]phenyl]-5-(4-iodophenyl)-3,4-diphenylthiophene (II). II 6.5, N,N-diphenylamine 2.0, and anhydrous K2CO3 5 g were stirred in 30 g o-chlorobenzene at 190° for 8 h, processed similarly as described above to give, after purification by sublimation at 270° and 10-6 torr, 6.1 g 2-[4-[N,N-di(1-naphthyl)amino]phenyl]-5-[4-[bis(4-methylphenyl)amino]phenyl]-3,4-diphenylthiophene (III) as light yellow solid (glass transition temperature 126°). An electroluminescent device with a hole injection layer of III vapor-deposited on a ITO electrode emitted green light at 50°, 6.5 V, 10 mA/cm2, and luminance of 480 cd/m2 with a half life of 760 h.
IT 404353-96-4P
RL: DEV (Device component use); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

L19 ANSWER 91 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(prepn. of bis(p-aminophenyl)diphenylthiofuran derivs. as pos. hole injection transport materials for org. electroluminescent devices)
RN 404353-96-4 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[bis(4-methoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

PAGE 1-A



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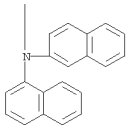

L19 ANSWER 92 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:596595 CAPLUS
DOCUMENT NUMBER: 139:157140
TITLE: Novel amine compounds for hole-injecting/transporting materials of organic electroluminescent devices
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003221393 | A | 20030805 | JP 2002-18720 | 20020128 |

PRIORITY APPLN. INFO.: JP 2002-18720 20020128

OTHER SOURCE(S): MARPAT 139:157140
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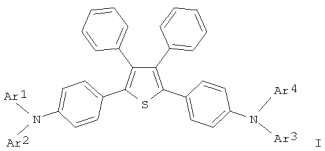
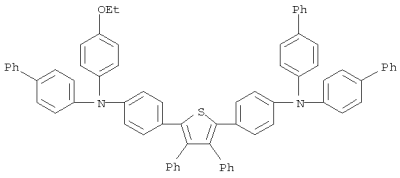


I

AB The compds. are I (Ar1-Ar3 = biphenyl; Ar4 = Ph, naphthyl). Electroluminescent devices containing the compds. show improved stability and durability.
IT 401479-81-0
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)
(novel amine compds. for hole-injecting/transporting materials of organic LED)
RN 401479-81-0 CAPLUS
CN [1,1'-Biphenyl]-4-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[[1,1'-biphenyl]-4-yl(4-ethoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 92 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 93 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:591193 CAPLUS
DOCUMENT NUMBER: 139:149520
TITLE: Preparation of aralkylpyrrolidines and -azetidines as Edg receptor agonists
INVENTOR(S): Bugianesi, Robert L.; Doherty, George A.; Gentry, Amy; Hale, Jeffrey J.; Lynch, Christopher L.; Mills, Sander G.; Neway, William E., III
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003062252 | A1 | 20030731 | WO 2003-US1196 | 20030115 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2472715 | A1 | 20030731 | CA 2003-2472715 | 20030115 |
| EP 1470137 | A1 | 20041027 | EP 2003-705779 | 20030115 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| JP 2005515259 | T | 20050526 | JP 2003-562129 | 20030115 |
| US 2005033055 | A1 | 20050210 | US 2004-500895 | 20040707 |

PRIORITY APPLN. INFO.: US 2002-350000P P 20020118
WO 2003-US1196 W 20030115

OTHER SOURCE(S): MARPAT 139:149520
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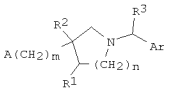
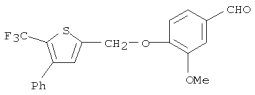


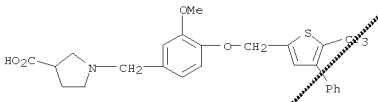
I

AB Title compds. I [Ar = (un)substituted Ph, naphthyl; A = CO2H, P(O)(OH)2, P(O)OH, SO3H, 1H-tetrazol-5-yl; R1, R2 = H, halogen, OH, CO2H, (un)substituted alkyl; R3 = H, (un)substituted alkyl; m, n = 0, 1] were

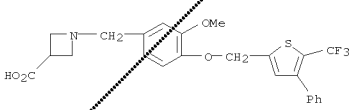
L19 ANSWER 93 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
prepd. for use as Edg receptor agonists, useful for treating immune mediated diseases and conditions, such as bone marrow, organ and tissue transplant rejection (no data). Thus, 3-pyrrolidinol was converted to di-Et 3-hydroxypyrrolidin-3-ylphosphonate and treated with 4-nonylbenzaldehyde, followed by ester hydrolysis to give 1-(4-nonylbenzyl)-3-hydroxypyrrolidine-3-phosphonic acid.
IT 570424-11-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aralkylpyrrolidines and -azetidines as Edg receptor agonists)
RN 570424-11-2 CAPLUS
CN Benzaldehyde, 3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



IT 570423-77-7P 570423-78-8P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aralkylpyrrolidines and -azetidines as Edg receptor agonists)
RN 570423-77-7 CAPLUS
CN 3-Pyrrolidinecarboxylic acid, 1-[[3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 570423-78-8 CAPLUS
CN 3-Azetidinecarboxylic acid, 1-[[3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS

L19 ANSWER 93 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

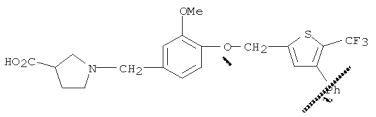
L19 ANSWER 94 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:590932 CAPLUS
DOCUMENT NUMBER: 139:149413
TITLE: Selective S1P1/Edg1 receptor agonists
INVENTOR(S): Doherty, George A.; Forrest, Michael J.; Hajdu, Richard; Hale, Jeffrey J.; Li, Zhen; Mandala, Suzanne M.; Mills, Sander G.; Rosen, Hugh; Scolnick, Edward M.
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 202 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003061567 | A2 | 20030731 | WO 2003-US1120 | 20030114 |
| WO 2003061567 | A3 | 20031224 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2004058894 | A1 | 20040325 | US 2003-339380 | 20030109 |
| CA 2472680 | A1 | 20030731 | CA 2003-2472680 | 20030114 |
| EP 1469863 | A2 | 20041027 | EP 2003-731917 | 20030114 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK | | | | |
| AU 2003216054 | B2 | 20070104 | AU 2003-216054 | 20030114 |
| US 2005070506 | A1 | 20050331 | US 2004-501176 | 20040712 |

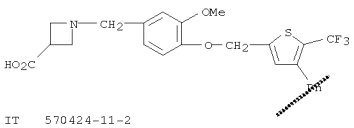
PRIORITY APPLN. INFO.: US 2002-349991P P 20020118
US 2002-362566P P 20020307
US 2002-382933P P 20020523
WO 2003-US1120 W 20030114

AB The present invention encompasses a method of treating an immunoregulatory abnormality in a mammalian patient in need of such treatment comprising administering to said patient a compound which is an agonist of the S1P1/Edg1 receptor in an amount effective for treating said immunoregulatory abnormality, wherein said compound possesses a selectivity for the S1P1/Edg1 receptor over the S1PR3/Edg3 receptor, said compound administered in an amount

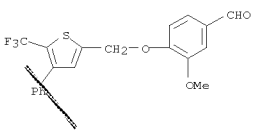
L19 ANSWER 94 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
effective for treating said immunoregulatory abnormality. Thus, 4-HOC6H4CHO was treated with Me(CH2)7I to give 4-Me(CH2)7OC6H4CHO which was treated with H2N(CH2)3P(O)(OH)2 to give 4-Me(CH2)7OC6H4CH2NH(CH2)3P(O)(OH)2 which had an EC50 for S1P1 agonism of 1.5 nM and for S1P3 agonism of 6.0 nM.
IT 570423-77-7P 570423-78-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino functionalized organo phosphonates or organo carboxylates as S1P1/Edg1 receptor agonists)
RN 570423-77-7 CAPLUS
CN 3-Pyrrolidinecarboxylic acid, 1-[[3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



RN 570423-78-8 CAPLUS
CN 3-Azetidinecarboxylic acid, 1-[[3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]phenyl]methyl]- (9CI) (CA INDEX NAME)



IT 570424-11-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amino functionalized organo phosphonates or organo carboxylates as S1P1/Edg1 receptor agonists)
RN 570424-11-2 CAPLUS
CN Benzaldehyde, 3-methoxy-4-[[4-phenyl-5-(trifluoromethyl)-2-thienyl]methoxy]- (9CI) (CA INDEX NAME)



L19 ANSWER 94 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:566703 CAPLUS
DOCUMENT NUMBER: 139:314378
TITLE: Novel glassy nematic liquid crystals for non-destructive rewritable optical memory and photonic switching
AUTHOR(S): Chen, Shaw H.; Chen, H. M. Philip; Geng, Yanhou; Jacobs, Stephen D.; Marshall, Kenneth L.; Blanton, Thomas N.
CORPORATE SOURCE: Department of Chemical Engineering Center for Optoelectronics and Imaging, University of Rochester, Rochester, NY, 14623-1212, USA
SOURCE: Advanced Materials (Weinheim, Germany) (2003), 15(13), 1061-1065
CODEN: ADVMEW; ISSN: 0935-9648
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English

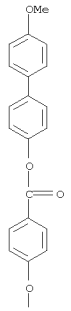
AB Dithienylethene-containing glassy nematic liquid crystals were synthesized, in which the dithienylethene core's electronic transition moment is uniaxially aligned. Large changes in refractive index and optical birefringence could be induced in the solid state by photochem. means. Applications in non-destructive rewritable optical memory and high-speed photonic switches are envisaged.

IT 611206-44-1P 611206-45-2P 611206-46-3P
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(design and properties of morphol. stable glassy nematic liquid crystals containing dithienylethene core for rewritable optical memory and photonic switching)

RN 611206-44-1 CAPLUS
CN 1,4-Benzenedicarboxylic acid, (3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[(3,5-dimethyl-4,2-thiophenediyl)-4,1-phenylene] bis[2-[4-[[(4'-methoxy[1,1'-biphenyl]-4-yl)oxy]carbonyl]phenoxy]ethyl] ester (9CI) (CA INDEX NAME)

L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

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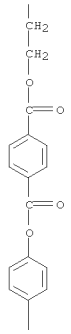
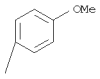



L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B

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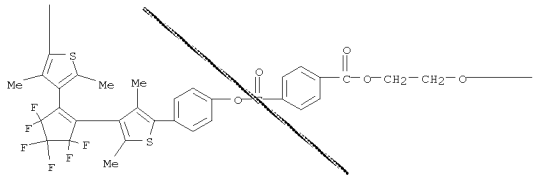


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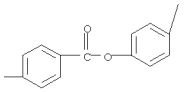
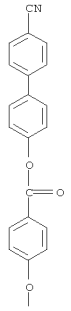



RN 611206-45-2 CAPLUS

L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN 1,4-Benzenedicarboxylic acid, (3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[(3,5-dimethyl-4,2-thiophenediyl)-4,1-phenylene] bis[3-[4-[[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]carbonyl]phenoxy]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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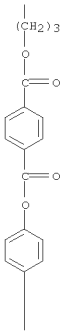

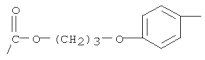

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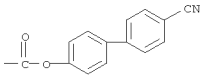
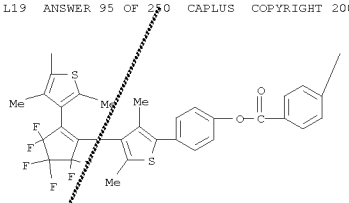


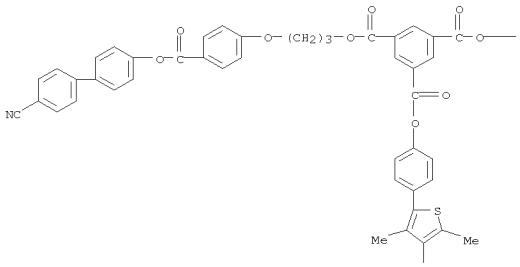
L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 3-A



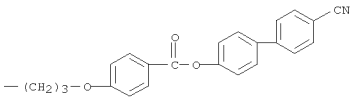
RN 612206-46-3 CAPLUS
CN 1,3,5-Benzenetricarboxylic acid, (3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[(3,5-dimethyl-4,2-thiophenediyl)-4,1-phenylene] tetrakis[3-[4-[[(4'-cyano[1,1'-biphenyl]-4-yl)oxy]carbonyl]phenoxy]propyl] ester (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



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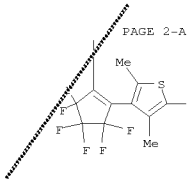

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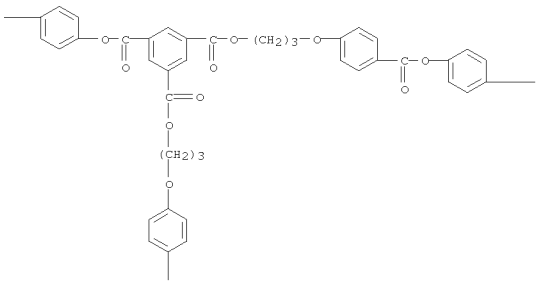
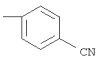


L19 ANSWER 95 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-C



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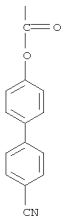

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 96 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:488876 CAPLUS
DOCUMENT NUMBER: 139:60191
TITLE: Organic electroluminescence devices with high luminescence efficiency
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003178881 | A | 20030627 | JP 2001-375493 | 20011210 |
| PRIORITY APPLN. INFO.: | | | JP 2001-375493 | 20011210 |

OTHER SOURCE(S): MARPAT 139:60191
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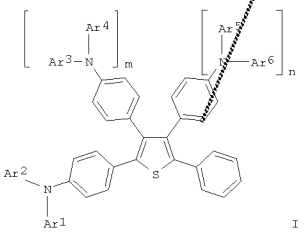
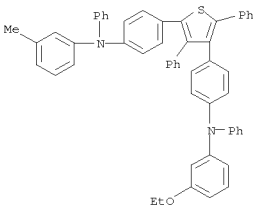


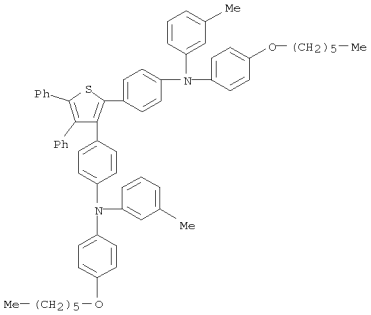
I

AB The device has ≥1 layers containing arylaminothiophenes I (Ar1-6 = aryl; m, n = 0, 1; m ≠ n; Ar1 and Ar2, Ar3 and Ar4, Ar5 and Ar6 maybe forming a ring with N) between a pair of electrodes. The layer containing I may be a hole transport layer or a luminescence layer.
IT 547755-30-6 547755-31-7 547755-41-9
547755-53-3 547755-54-4
RL: DEV (Device component use); USES (Uses)
(hole transport layer containing; arylaminophenylthiophenes for organic
electroluminescence devices with high luminescence efficiency)
RN 547755-30-6 CAPLUS
CN Benzenamine, 4,4'-(4,5-diphenyl-2,3-thiophenediyl)bis[N-(4-methoxyphenyl)-

L19 ANSWER 96 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzenamine, N-(3-ethoxyphenyl)-4-[5-[4-[(3-methylphenyl)phenylamino]phenyl]-2,4-diphenyl-3-thienyl]-N-phenyl- (9CI) (CA INDEX NAME)

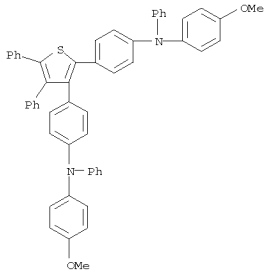


RN 547755-53-3 CAPLUS
CN Benzenamine, 4,4'-(4,5-diphenyl-2,3-thiophenediyl)bis[N-[4-(hexyloxy)phenyl]-N-(3-methylphenyl)- (9CI) (CA INDEX NAME)

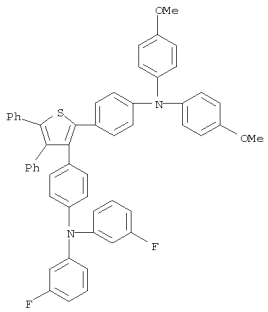


RN 547755-54-4 CAPLUS
CN Benzenamine, 4,4'-(3,5-diphenyl-2,4-thiophenediyl)bis[N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 96 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
N-phenyl- (9CI) (CA INDEX NAME)

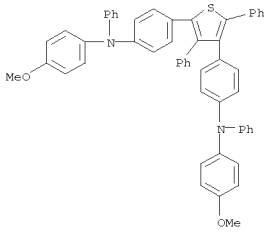


RN 547755-31-7 CAPLUS
CN Benzenamine, 4-[3-[4-[bis(3-fluorophenyl)amino]phenyl]-4,5-diphenyl-2-thienyl]-N,N-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 547755-41-9 CAPLUS

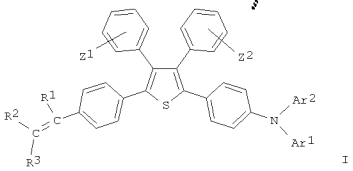
L19 ANSWER 96 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 97 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:412165 CAPLUS
DOCUMENT NUMBER: 138:409114
TITLE: Organic field-type electroluminescent device and thiophene compounds for it
INVENTOR(S): Ishida, Tsutomu; Shimamura, Takehiko; Tanabe, Yoshimitsu; Totani, Yoshiyuki; Nakatsuka, Masakatsu
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

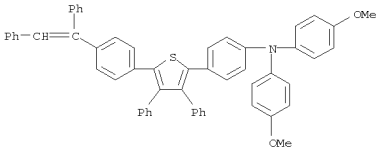
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003157977 | A | 20030530 | JP 2001-353764 | 20011119 |
| JP 3818894 | B2 | 20060906 | | |
| PRIORITY APPLN. INFO.: | | | JP 2001-353764 | 20011119 |

OTHER SOURCE(S): MARPAT 138:409114
GI

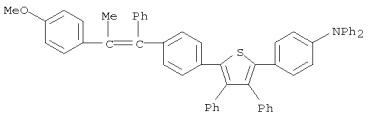


I

AB The electroluminescent (EL) device contains ≥1 thiophene compound represented by I [R1-3 = H, linear, branched, or cyclic alkyl, (substituted) aryl, (substituted) aralkyl; Ar1-2 = (substituted) aryl; Ar1 and Ar2 may form N-containing heterocyclic ring; Z1-2 = H, halo, linear, branched, or cyclic alkyl or alkoxy, (substituted) aryl, (substituted) aralkyl, (substituted) amino] as a hole-transporting material, a luminescent material, and/or an electron-injecting/transporting material. The thiophene compound is also claimed. The EL device has high luminescent efficiency and emits light with high brightness.
IT 531509-21-4P 531509-22-5P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(organic field-type electroluminescent device containing thiophene compound for high luminescent efficiency and brightness)
RN 531509-21-4 CAPLUS
CN Benzenamine, 4-[5-[4-(1,2-diphenylethenyl)phenyl]-3,4-diphenyl-2-thienyl]-N,N-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

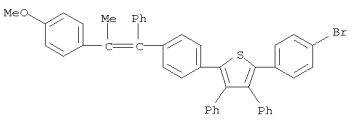


RN 531509-22-5 CAPLUS
CN Benzenamine, 4-[5-[4-[2-(4-methoxyphenyl)-1-phenyl-1-propenyl]phenyl]-3,4-diphenyl-2-thienyl]-N,N-diphenyl- (9CI) (CA INDEX NAME)



IT 531509-47-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(organic field-type electroluminescent device containing thiophene compound for high luminescent efficiency and brightness)
RN 531509-47-4 CAPLUS
CN Thiophene, 2-(4-bromophenyl)-5-[4-[2-(4-methoxyphenyl)-1-phenyl-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

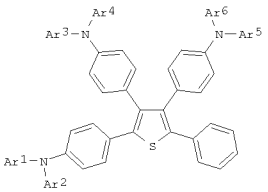
L19 ANSWER 97 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 98 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:398371 CAPLUS
DOCUMENT NUMBER: 139:14695
TITLE: Organic electroluminescent device with aryl amine-substituted thiophene
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003151778 | A | 20030523 | JP 2001-343640 | 20011108 |
| PRIORITY APPLN. INFO.: | | | JP 2001-343640 | 20011108 |

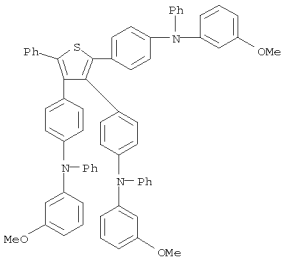
OTHER SOURCE(S): MARPAT 139:14695
GI



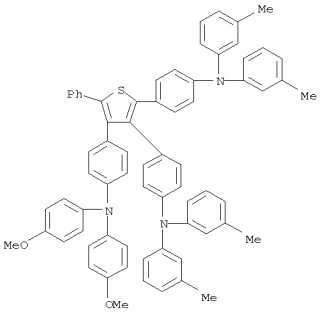
I

AB The invention refers to an organic electroluminescent device comprising I [Ar1-6 = (un)substituted aryl, where adjacent groups may joining together and form heterocyclic rings including the shared N atom].
IT 530129-05-6 530129-06-7 530129-07-8 530129-26-1
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent device with aryl amine-substituted thiophene)
RN 530129-05-6 CAPLUS
CN Benzenamine, 4,4',4''-(5-phenyl-2,3,4-thiophenetriyl)tris[N-(3-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 98 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



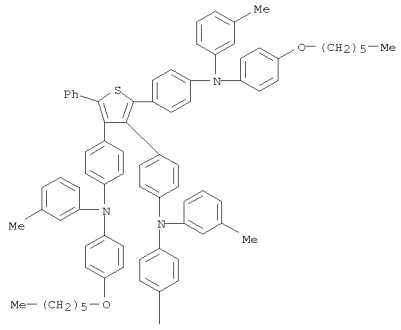
RN 530129-06-7 CAPLUS
CN Benzenamine, 4,4'-[4-[4-[bis(4-methoxyphenyl)amino]phenyl]-5-phenyl-2,3-thiophenediyl]bis[N,N-bis(3-methylphenyl)- (9CI) (CA INDEX NAME)



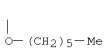
RN 530129-07-8 CAPLUS
CN Benzenamine, N-[4-[3,4-bis[4-(diphenylamino)phenyl]-5-phenyl-2-thienyl]phenyl]-3-ethyl-5-methoxy-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 98 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

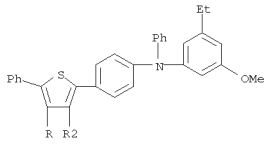


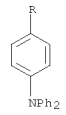
PAGE 2-A



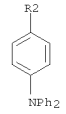
L19 ANSWER 98 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A





PAGE 2-A



RN 530129-26-1 CAPLUS
CN Benzenamine, 4,4',4''-(5-phenyl-2,3,4-thiophenetriyl)tris[N-[4-(hexyloxy)phenyl]-N-(3-methylphenyl)- (9CI) (CA INDEX NAME)

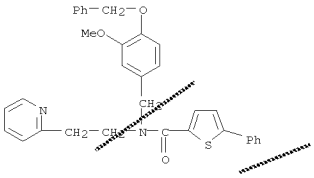
L19 ANSWER 99 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:356419 CAPLUS
DOCUMENT NUMBER: 138:368770
TITLE: Preparation of pyridinylethylamines and amides as anticancer drugs.
INVENTOR(S): Menon, Sanjay R.; Lu, Yingchun; Sakamuri, Sukumar; Chen, Quin-Zene; Khazak, Vladimir; Agarwal, Seema
PATENT ASSIGNEE(S): Morphochem Aktiengesellschaft fuer Kombinatorische Chemie, Germany
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003037865 | A1 | 20030508 | WO 2002-EP12222 | 20021031 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2468761 | A1 | 20030508 | CA 2002-2468761 | 20021031 |
| EP 1442018 | A1 | 20040804 | EP 2002-787539 | 20021031 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| US 2005228017 | A1 | 20051013 | US 2005-497449 | 20050330 |
| PRIORITY APPLN. INFO.: | | | US 2001-335300P | P 20011031 |
| | | | WO 2002-EP12222 | W 20021031 |

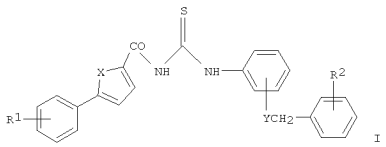
OTHER SOURCE(S): MARPAT 138:368770
AB (R3Y)(R1X)NUR2 [n = 0-5; X, Y = CH2, CO, SO2, CONH; R1 = (substituted) aryl, aralkyl, heteroaryl, heteroarylalkyl; R2 = (substituted) heteroalkyl, aryl, aralkyl, heteroaryl, heteroaralkyl, cycloalkyl, heterocycloalkyl, heteroalkylcycloalkyl; R3 = (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, cycloalkyl, alkylcycloalkyl, heterocycloalkyl, heteroalkylcycloalkyl, aryl, heteroaryl, heteroarylalkyl, aralkyl], were prepared Thus, N-(4-benzyloxy-3-methoxybenzyl)-N-(2-pyridin-2-ylethyl)amine (preparation given) in ClCH2CH2Cl was treated with polymer-supported morpholine and 2-chlorobenzoyl chloride followed by stirring for 24 h. Polymer-supported isocyanate, polymer-supported tris(2-aminoethyl)amine, and ClCH2CH2Cl were added followed by stirring for 24 h to give 84% N-(4-benzyloxy-3-methoxybenzyl)-N-(2-pyridin-2-ylethyl)-2-chlorobenzamide. Title compds. showed IC50's of 5-60 μM in secondary luciferase assays in NIH3T3, CHO, or HEK293 cells.
IT 521312-57-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

L19 ANSWER 99 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(Biological study); USES (Uses)
(prepn. of pyridinylethylamines and amides as anticancer drugs)
RN 521312-57-2 CAPLUS
CN 2-Thiophenecarboxamide, N-[[3-methoxy-4-(phenylmethoxy)phenyl]methyl]-5-phenyl-N-[2-(2-pyridinyl)ethyl]- (9CI) (CA INDEX NAME)



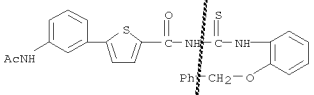
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 100 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:311129 CAPLUS
DOCUMENT NUMBER: 139:345301
TITLE: Synthesis of the aroyl thiourea derivatives as novel small molecule inhibitors of cysteine protease of Trypanosoma cruzi
AUTHOR(S): Guo, Chun; Fang, Lin; Du, Xiaohui; McKerrow, James H.; Cohen, Fred E.
CORPORATE SOURCE: School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang, 110016, Peop. Rep. China
SOURCE: Zhongguo Yaowu Huaxue Zazhi (2002), 12(4), 200-204
CODEN: ZYHZEF; ISSN: 1005-0108
PUBLISHER: Zhongguo Yaowu Huaxue Zazhi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:345301
GI

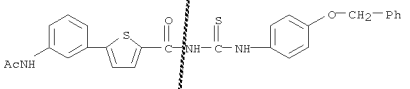


AB New aroyl thiourea derivs. were designed and synthesized to find novel small mol. inhibitors of cysteine protease of Trypanosoma cruzi. A series of aroyl thiourea derivs. was prepared from corresponding aroyl isothiocyanates and substituted anilines. The chemical structures were characterized by HRMS(EI) and 1H-NMR spectroscopy. A total of 20 aroyl thiourea derivs. were synthesized. The results of the bioassay in vitro against cruzain showed that all the synthetic compds. exhibited certain activity, among which two compds. [I (R1 = 3-acetamido, R2 = o-fluoro, X = S, Y = 2-O) and I (R1 = 4-chloro, R2 = o-fluoro, X = O, Y = 2-O)] were more active than the control inhibitor tf-175. The class of inhibitors might be potential drugs for antitrypanosomal chemotherapy.
IT 618889-88-6P 618889-89-7P 618889-90-0P
618889-91-1P 618889-92-2P 618889-93-3P
618889-94-4P 618889-95-5P 618889-96-6P
RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of aroyl thiourea derivs. as novel small mol. inhibitors of cysteine protease of Trypanosoma cruzi)

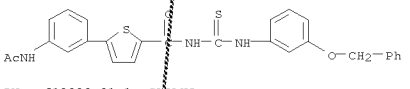
L19 ANSWER 100 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 618889-88-6 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[2-(phenylmethoxy)phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)



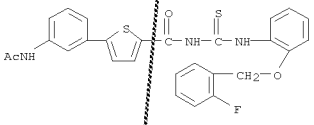
RN 618889-89-7 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[4-(phenylmethoxy)phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)



RN 618889-90-0 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[3-(phenylmethoxy)phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

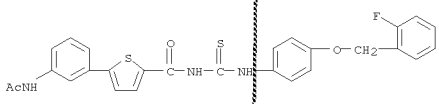


RN 618889-91-1 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[2-[(2-fluorophenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

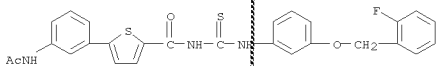


RN 618889-92-2 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[4-[(2-fluorophenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

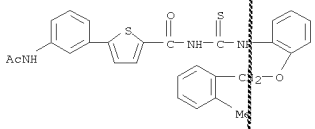
L19 ANSWER 100 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



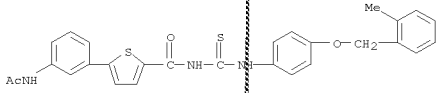
RN 618889-93-3 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[3-[(2-fluorophenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)



RN 618889-94-4 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[2-[(2-methylphenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

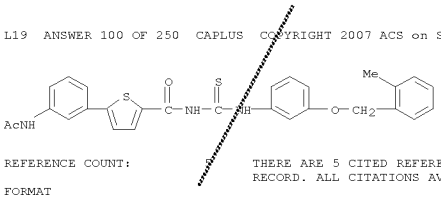


RN 618889-95-5 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[4-[(2-methylphenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)



RN 618889-96-6 CAPLUS
CN 2-Thiophenecarboxamide, 5-[3-(acetylamino)phenyl]-N-[[[3-[(2-methylphenyl)methoxy]phenyl]amino]thioxomethyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 100 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L19 ANSWER 101 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

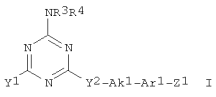
ACCESSION NUMBER: 2003:242160 CAPLUS
DOCUMENT NUMBER: 138:271705
TITLE: Preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase
INVENTOR(S): Delorme, Daniel; Woo, Soon Hyung; Vaisburg, Arkadii; Moradel, Oscar; Leit, Silvana; Raeppel, Stephane; Frechette, Sylvie; Bouchain, Giliane
PATENT ASSIGNEE(S): Methylgene, Inc., Can.
SOURCE: PCT Int. Appl., 347 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003024448 | A2 | 20030327 | WO 2002-US29017 | 20020912 |
| WO 2003024448 | A3 | 20031113 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2465978 | A1 | 20030327 | CA 2002-2465978 | 20020912 |
| AU 2002327627 | A1 | 20030401 | AU 2002-327627 | 20020912 |
| EP 1429765 | A2 | 20040623 | EP 2002-763627 | 20020912 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| BR 2002012510 | A | 20040824 | BR 2002-12510 | 20020912 |
| CN 1578663 | A | 20050209 | CN 2002-822690 | 20020912 |
| JP 2005508905 | T | 20050407 | JP 2003-528544 | 20020912 |
| JP 3795044 | B2 | 20060712 | | |
| IN 2004KN00257 | A | 20061110 | IN 2004-KN257 | 20040225 |
| MX 2004PA02397 | A | 20041202 | MX 2004-PA2397 | 20040312 |
| JP 2005255683 | A | 20050922 | JP 2005-80310 | 20050318 |
| AU 2006252047 | A1 | 20070111 | AU 2006-252047 | 20061214 |

PRIORITY APPLN. INFO.: US 2001-322402P P 20010914
US 2002-391728P P 20020626
AU 2002-327627 A3 20020912
JP 2003-528544 A3 20020912
WO 2002-US29017 W 20020912

OTHER SOURCE(S): MARPAT 138:271705
GI

L19 ANSWER 101 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



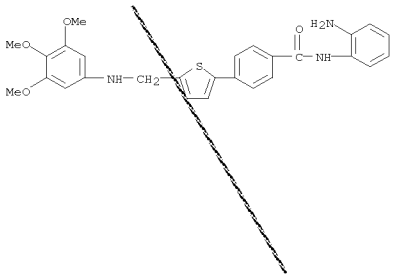
AB The invention relates to triazines (shown as I; variables defined below; e.g. 4-[[4-amino-6-(2-indanylamino)-[1,3,5]triazin-2-ylamino]methyl]-N-(2-aminophenyl)benzamide) and Cy3-X1-Ar2-(C(R5):C(R6))qC(O)NH-Ay2 (II; variables defined below; e.g. ), many of which are N-(o-aminophenyl)carboxamides, as inhibitors of histone deacetylase (data included for many I and II). The invention provides compds. and methods for inhibiting histone deacetylase enzymic activity. The invention also provides compns. and methods for treating cell proliferative diseases and conditions. Antineoplastic effects of some I and II are illustrated for colorectal, pulmonary and pancreatic neoplasms; also the combined antineoplastic effect of histone deacetylase inhibitors and histone deacetylase antisense oligonucleotides on tumor cells in vivo was demonstrated. For I: R3 and R4 = H, L1, Cy1 and -L1-Cy1 (L1 = C1-C6 alkyl, C2-C6 heteroalkyl, or C3-C6 alkenyl; Cy1 = cycloalkyl, aryl, heteroaryl, or heterocyclyl) or R3 and R4 are taken together with the adjacent N atom to form a 5-, 6-, or 7-membered ring, wherein the ring atoms = C, O, S, and N, and wherein the ring is optionally substituted, and optionally forms part of a bicyclic ring system, or is optionally fused to one or two aryl or heteroaryl rings, or to one or two saturated or partially unsatd. cycloalkyl or heterocyclic rings, each of which rings and ring systems is optionally substituted. Y1 = -N(R1)(R2), -CH2-C(O)-N(R1)(R2), halogen, and H (R1 and R2 = H, L1, Cy1, and -L1-Cy1). Y2 = chemical bond or N(R0) (R0 = H, alkyl, aryl, aralkyl, and acyl); Ak1 = C1-C6 alkylene, C1-C6-heteroalkylene (preferably, in which one -CH2- is replaced with -NH-, and more preferably -NH-CH2), C2-C6 alkenylene or C2-C6 alkynylene; Ar1 = arylene or heteroarylene, either of which is optionally substituted; and Z1 = C(O)NH-Ay1 and CH:CHC(O)NH-Ay1 (Ay1 = aryl or heteroaryl, each of which is optionally substituted). For II: Cy2 = cycloalkyl, aryl, heteroaryl, or heterocyclyl; X1 = covalent bond, M1-L2-M1, and L2-M2-L2 (L2 = chemical bond, C1-C4 alkylene, C2-C4 alkenylene, and C2-C4 alkynylene, provided that L2 is not a chemical bond when X1 is M1-L2-M1; M1 = -O-, -N(R7)-, -S-, -S(O)-, S(O)2-, -S(O)2N(R7)-, -N(R7)S(O)2-, -C(O)-, -C(O)NH-, -NHC(O)-, -NHC(O)-O- and -OC(O)NH- (R7 = H, alkyl, aryl, aralkyl, acyl, heterocyclyl, and heteroaryl); and M2 = M1, heteroarylene, and heterocyclylene, either of which rings is optionally substituted). Ar2 = arylene or heteroarylene, each of which is optionally substituted; R5 and R6 = H, alkyl, aryl, and aralkyl; q is 0 or 1; and Ay2 is a 5-6 membered cycloalkyl, heterocyclyl, or heteroaryl substituted with

L19 ANSWER 101 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

an amino or hydroxy moiety (preferably these groups are ortho to the amide N to which Ay2 is attached) and further optionally substituted; provided that when Cy2 is naphthyl, X1 is -CH2-, Ar2 is Ph, R5 and R6 are H, and q is 0 or 1, Ay2 is not Ph or o-hydroxyphenyl. Although the methods of prepn. are not claimed, hundreds of example prepns. are included.

IT 503042-76-0P, N-(2-Aminophenyl)-4-(5-(((3,4,5-trimethoxyphenyl)amino)methyl)thien-2-yl)benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of triazinyl and other carboxamides as inhibitors of histone deacetylase for treating cell proliferative disorders)

RN 503042-76-0 CAPLUS
CN Benzamide, N-(2-aminophenyl)-4-[5-[[(3,4,5-trimethoxyphenyl)amino]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

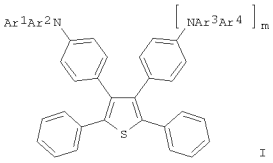


L19 ANSWER 102 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:240287 CAPLUS
DOCUMENT NUMBER: 138:278160
TITLE: Organic electroluminescent device showing high emission efficiency and long service life
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003092187 | A | 20030328 | JP 2001-283808 | 20010918 |

PRIORITY APPLN. INFO.: JP 2001-283808 20010918

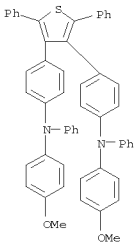
OTHER SOURCE(S): MARPAT 138:278160
GI



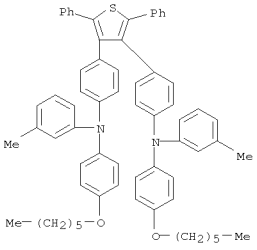
I

AB The device contains a arylamino-substituted tetraphenylthiophene derivative I
[Ar1-4 = (substituted) aryl; Ar1 and Ar2 may be connected to form a heterocycle; Ar3 and Ar4 may be connected to form a heterocycle; m = 0, 1]
as a hole-transport material.
IT 503279-41-2 503279-43-4 503279-71-8
503279-73-0 503279-75-2
RL: DEV (Device component use); USES (Uses)
(hole-transport material; organic electroluminescent device containing arylamino-substituted tetraphenylthiophene as hole-transport material)
RN 503279-41-2 CAPLUS
CN Benzenamine, N-(4-methoxyphenyl)-N-phenyl-4-(2,4,5-triphenyl-3-thienyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 102 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

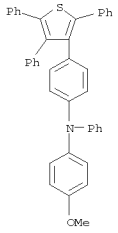


RN 503279-73-0 CAPLUS
CN Benzenamine, 4,4'-(2,5-diphenyl-3,4-thiophenediyl)bis[N-[4-(hexyloxy)phenyl]-N-(3-methylphenyl)- (9CI) (CA INDEX NAME)

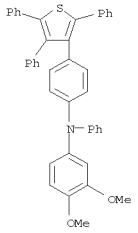


RN 503279-75-2 CAPLUS
CN Benzenamine, 4,4'-(2,5-diphenyl-3,4-thiophenediyl)bis[N-(3-ethyl-5-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 102 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



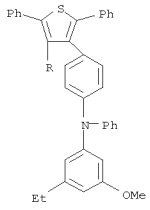
RN 503279-43-4 CAPLUS
CN Benzenamine, 3,4-dimethoxy-N-phenyl-N-[4-(2,4,5-triphenyl-3-thienyl)phenyl]- (9CI) (CA INDEX NAME)



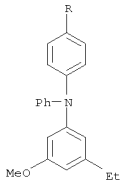
RN 503279-71-8 CAPLUS
CN Benzenamine, 4,4'-(2,5-diphenyl-3,4-thiophenediyl)bis[N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 102 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



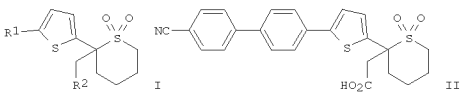
PAGE 2-A



L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:221683 CAPLUS
DOCUMENT NUMBER: 138:238014
TITLE: Preparation of 2-(thiophenyl)thiopyran-1,1-dioxides as
MMP or TNF-α inhibitors
INVENTOR(S): Neya, Masahiro; Sawada, Akihiko; Ohne, Kazuhiko; Abe, Yoshito; Mizutani, Tsuyoshi; Ishibashi, Naoki; Inoue, Makoto
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 168 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003022842 | A1 | 20030320 | WO 2002-JP8895 | 20020902 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2459882 | A1 | 20030320 | CA 2002-2459882 | 20020902 |
| AU 2002326168 | A1 | 20030324 | AU 2002-326168 | 20020902 |
| EP 1423386 | A1 | 20040602 | EP 2002-760801 | 20020902 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK | | | | |
| JP 2005502706 | T | 20050127 | JP 2003-526917 | 20020902 |
| CN 1582287 | A | 20050216 | CN 2002-822158 | 20020902 |
| US 2004266826 | A1 | 20041230 | US 2004-487242 | 20040227 |
| PRIORITY APPLN. INFO.: | | | AU 2001-7555 A | 20010907 |
| | | | WO 2002-JP8895 W | 20020902 |

OTHER SOURCE(S): MARPAT 138:238014
GI



I II

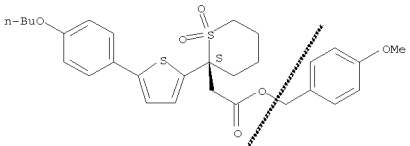
L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

AB Title compds. I [wherein R1 = (un)substituted Ph, naphthyl, bicyclic heterocyclyl, alkenyl, or alkynyl; R2 = CO2H or protected CO2H; or a salt thereof] were prepared as matrix metalloproteinase (MMP) or tumor necrosis factor α (TNF-α) inhibitors. For example, coupling of 2-(trimethylsilyl)ethyl (S)-[2-(5-bromothiophen-2-yl)-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate and 2-(4'-cyano-4-biphenylyl)-4,4,5,5-tetramethyl-1,3,2-dioxaborolane followed by deesterification gave II. Five compds. of the invention were tested for gelatinolytic activity against human MMP-9 and displayed inhibitory activity with IC50 values ranging from 1.37 nM to 16.0 nM. Thus, I are useful for treating and/or preventing diseases mediated by MMP or TNF-α (no data).

IT 501945-63-7P, 4-Methoxybenzyl (S)-[2-[5-(4-butoxyphenyl)thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-35-6P, 4-Methoxybenzyl (S)-[1,1-dioxo-2-[5-(4-hydroxyphenyl)thiophen-2-yl]-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(MMP or TNF-α inhibitor; preparation of (thiophenyl)thiopyrandioxides as MMP or TNF-α inhibitors)

RN 501945-63-7 CAPLUS
CN 2H-Thiopyran-2-acetic acid, 2-[5-(4-butoxyphenyl)-2-thienyl]tetrahydro-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

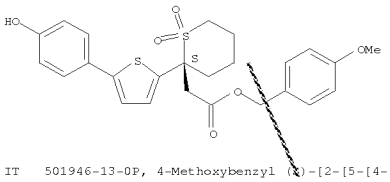
Absolute stereochemistry.



RN 501946-35-6 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-(4-hydroxyphenyl)-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

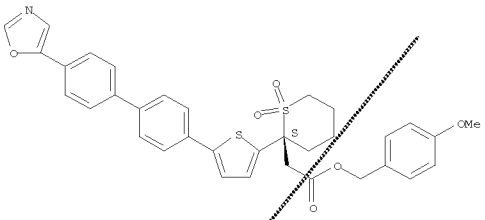


IT 501946-13-0P, 4-Methoxybenzyl (S)-[2-[5-[4-[4-(oxazol-5-yl)phenyl]phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-15-2P, 4-Methoxybenzyl (S)-[2-[5-[4-[4-(tert-butoxycarbonylamino)phenyl]phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-21-0P, 4-Methoxybenzyl (S)-[2-[5-[4-[(E)-2-(oxazol-5-yl)ethenyl]phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-22-1P, 4-Methoxybenzyl (S)-[2-[5-[4-(oxazol-5-ylmethoxy)phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-24-3P, 4-Methoxybenzyl (S)-[2-[5-[4-[(E)-2-(methylcarbamoyl)ethenyl]phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-26-5P, 4-Methoxybenzyl (S)-[2-[5-[4-[[(oxazol-5-yl)carbonyl]amino]phenyl]thiophen-2-yl]-1,1-dioxo-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-67-4P, 4-Methoxybenzyl (S)-[1,1-dioxo-2-[5-(4-pentyloxyphenyl)thiophen-2-yl]-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate 501946-69-6P, 4-Methoxybenzyl (S)-[1,1-dioxo-2-[5-[4-(1-methylethoxy)phenyl]thiophen-2-yl]-3,4,5,6-tetrahydro-2H-thiopyran-2-yl]acetate
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MMP or TNF-α inhibitor; preparation of (thiophenyl)thiopyrandioxides as MMP or TNF-α inhibitors)

RN 501946-13-0 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4'-(5-oxazolyl)[1,1'-biphenyl]-4-yl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

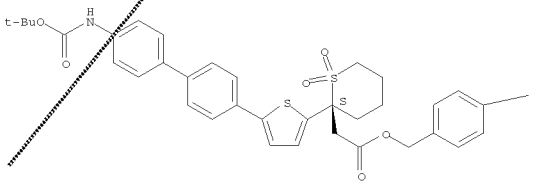
L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 501946-15-2 CAPLUS
CN 2H-Thiopyran-2-acetic acid, 2-[5-[4'-[[(1,1-dimethylethoxy)carbonyl]amino][1,1'-biphenyl]-4-yl]-2-thienyl]tetrahydro-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

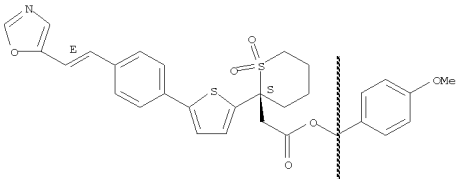


PAGE 1-B



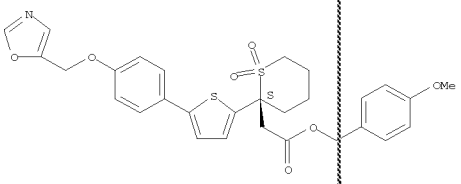
RN 501946-21-0 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-[(1E)-2-(5-oxazolyl)ethenyl]phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Absolute stereochemistry.
Double bond geometry as shown.



RN 501946-22-1 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-(5-oxazolylmethoxy)phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

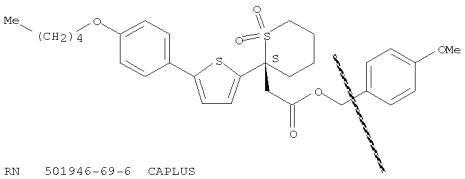
Absolute stereochemistry.



RN 501946-24-3 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-[(1E)-3-(methylamino)-3-oxo-1-propenyl]phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

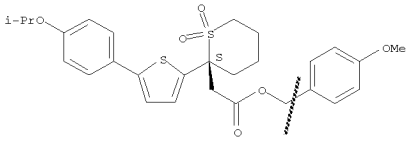
Absolute stereochemistry.
Double bond geometry as shown.

L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



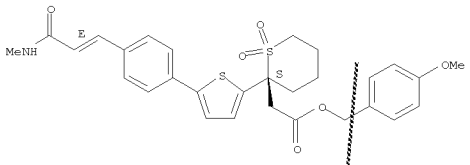
RN 501946-69-6 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-(1-methylethoxy)phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



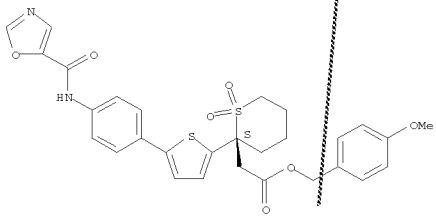
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 103 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 501946-26-5 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-[(5-oxazolylcarbonyl)amino]phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



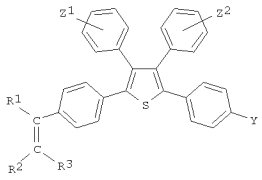
RN 501946-67-4 CAPLUS
CN 2H-Thiopyran-2-acetic acid, tetrahydro-2-[5-[4-(pentyloxy)phenyl]-2-thienyl]-, (4-methoxyphenyl)methyl ester, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:216943 CAPLUS
DOCUMENT NUMBER: 138:262449
TITLE: Thiophene derivatives and organic electroluminescent devices using them
INVENTOR(S): Ishida, Tsutomu; Shimamura, Takehiko; Tanabe, Yoshimitsu; Totani, Yoshiyuki; Nakatsuka, Masakatsu
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 136 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003081969 | A | 20030319 | JP 2002-147629 | 20020522 |
| PRIORITY APPLN. INFO.: | | | JP 2001-162586 A | 20010530 |
| | | | JP 2001-203918 A | 20010704 |

OTHER SOURCE(S): MARPAT 138:262449
GI

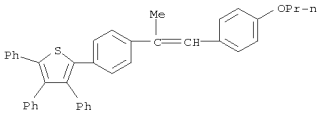


I

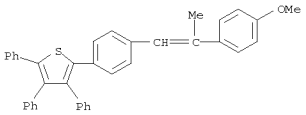
AB The invention relates to an organic electroluminescent device comprising a pair of electrodes sandwiching ≥1 layer(s) containing ≥1 thiophene derivs. I [R1-3 = H, straight, branched or cyclic alkyl, (un)substituted aryl or aralkyl; Y = H or C(R4):C(R5)(R6); R4-6 = H, straight, branched or cyclic alkyl, (un)substituted aryl or aralkyl; Z1-2 = H, halo, straight, branched or cyclic alkoxy, (un)substituted amino, aryl or aralkyl].
IT 502639-57-8 502639-59-0 502639-65-8
502639-69-2 502639-71-6 502639-72-7
502639-79-4 502639-80-7 502639-82-9
502639-87-4 502639-92-1 502639-93-2
502639-98-7 502639-99-8 502640-04-2
502640-07-5 502640-08-6 502640-12-2
502640-16-6 502640-20-2 502640-21-3
502640-28-0 502640-33-7 502640-34-8
502640-35-9 502640-39-3 502640-40-6
RL: DEV (Device component use); USES (Uses)

L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(novel thiophene derivs. for org. electroluminescent devices)

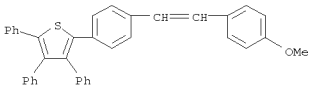
RN 502639-57-8 CAPLUS
CN Thiophene, 2-[4-[1-methyl-2-(4-propoxyphenyl)ethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)



RN 502639-59-0 CAPLUS
CN Thiophene, 2-[4-[2-(4-methoxyphenyl)-1-propenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

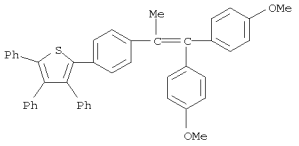


RN 502639-65-8 CAPLUS
CN Thiophene, 2-[4-[2-(4-methoxyphenyl)ethenyl]phenyl]-3,4,5-triphenyl- (9CI)
(CA INDEX NAME)

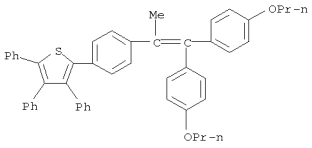


RN 502639-69-2 CAPLUS
CN Thiophene, 2-[4-[1-ethyl-2-(4-methoxyphenyl)-1-propenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

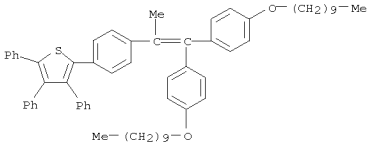
L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 502639-80-7 CAPLUS
CN Thiophene, 2-[4-[1-methyl-2,2-bis(4-propoxyphenyl)ethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

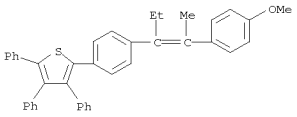


RN 502639-82-9 CAPLUS
CN Thiophene,
2-[4-[2,2-bis[4-(decyloxy)phenyl]-1-methylethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

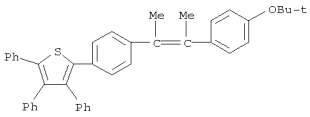


RN 502639-87-4 CAPLUS
CN Thiophene, 2-[4-[2-(4-ethoxyphenyl)-1-phenylethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

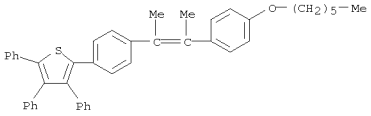
L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 502639-71-6 CAPLUS
CN Thiophene, 2-[4-[2-[4-(1,1-dimethylethoxy)phenyl]-1-methyl-1-propenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

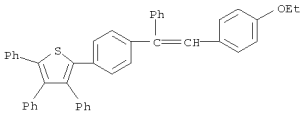


RN 502639-72-7 CAPLUS
CN Thiophene,
2-[4-[2-[4-(hexyloxy)phenyl]-1-methyl-1-propenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

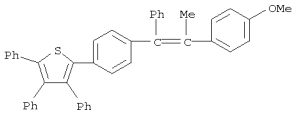


RN 502639-79-4 CAPLUS
CN Thiophene, 2-[4-[2,2-bis(4-methoxyphenyl)-1-methylethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)

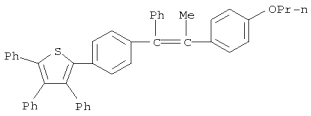
L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



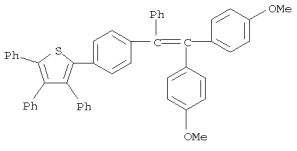
RN 502639-92-1 CAPLUS
CN Thiophene, 2-[4-[2-(4-methoxyphenyl)-1-phenyl-1-propenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)



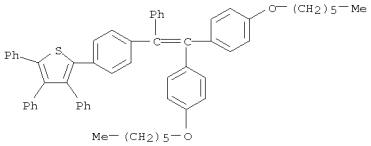
RN 502639-93-2 CAPLUS
CN Thiophene, 2,3,4-triphenyl-5-[4-[1-phenyl-2-(4-propoxyphenyl)-1-propenyl]phenyl]- (9CI) (CA INDEX NAME)



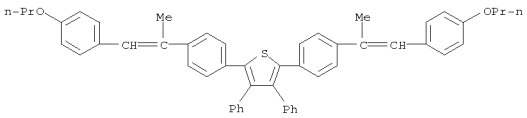
RN 502639-98-7 CAPLUS
CN Thiophene, 2-[4-[2,2-bis(4-methoxyphenyl)-1-phenylethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)



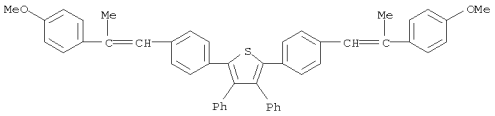
L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 502639-99-8 CAPLUS
CN Thiophene,
2-[4-[2,2-bis[4-(hexyloxy)phenyl]-1-phenylethenyl]phenyl]-3,4,5-triphenyl- (9CI) (CA INDEX NAME)



RN 502640-04-2 CAPLUS
CN Thiophene, 2,5-bis[4-[1-methyl-2-(4-propoxyphenyl)ethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

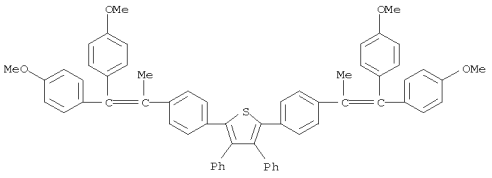


RN 502640-07-5 CAPLUS
CN Thiophene,
2,5-bis[4-[2-(4-methoxyphenyl)-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

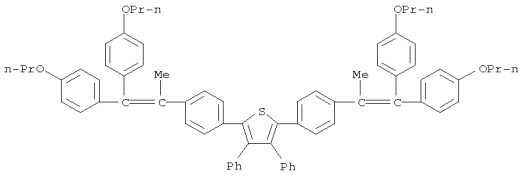


RN 502640-08-6 CAPLUS
CN Thiophene,
2,5-bis[4-[2-[4-(1-methylethoxy)phenyl]-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

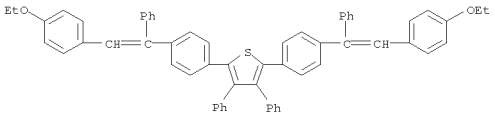
L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Thiophene,
2,5-bis[4-[2,2-bis(4-methoxyphenyl)-1-methylethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)



RN 502640-21-3 CAPLUS
CN Thiophene,
2,5-bis[4-[1-methyl-2,2-bis(4-propoxyphenyl)ethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

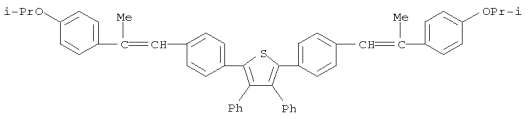


RN 502640-28-0 CAPLUS
CN Thiophene, 2,5-bis[4-[2-(4-ethoxyphenyl)-1-phenylethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)



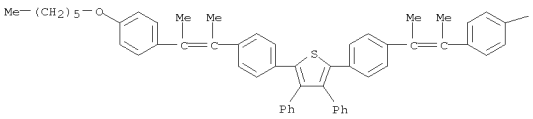
RN 502640-33-7 CAPLUS
CN Thiophene,
2,5-bis[4-[2-(4-methoxyphenyl)-1-phenyl-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 502640-12-2 CAPLUS
CN Thiophene, 2,5-bis[4-[2-[4-(hexyloxy)phenyl]-1-methyl-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

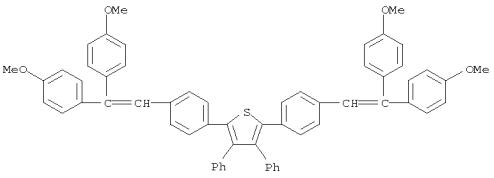
PAGE 1-A



PAGE 1-B

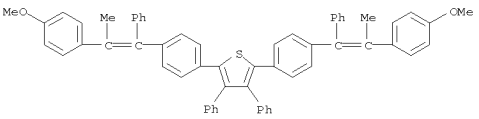


RN 502640-16-6 CAPLUS
CN Thiophene,
2,5-bis[4-[2,2-bis(4-methoxyphenyl)ethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

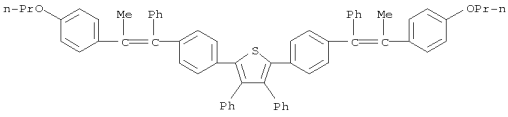


RN 502640-20-2 CAPLUS

L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

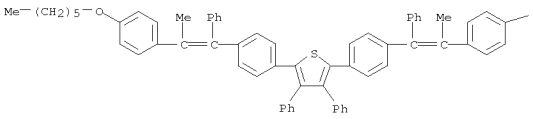


RN 502640-34-8 CAPLUS
CN Thiophene, 3,4-diphenyl-2,5-bis[4-[1-phenyl-2-(4-propoxyphenyl)-1-propenyl]phenyl]- (9CI) (CA INDEX NAME)



RN 502640-35-9 CAPLUS
CN Thiophene, 2,5-bis[4-[2-[4-(hexyloxy)phenyl]-1-phenyl-1-propenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

PAGE 1-A

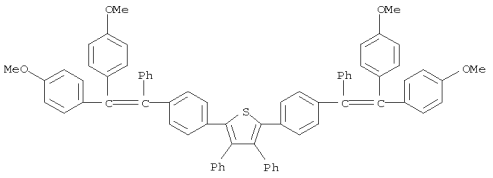


PAGE 1-B



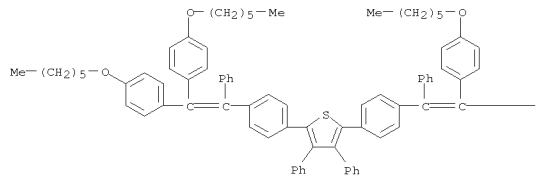
RN 502640-39-3 CAPLUS
CN Thiophene,
2,5-bis[4-[2,2-bis(4-methoxyphenyl)-1-phenylethenyl]phenyl]-3,4-diphenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 104 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

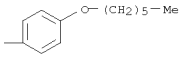


RN 502640-40-6 CAPLUS
CN Thiophene,
2,5-bis[4-[2,2-bis[4-(hexyloxy)phenyl]-1-phenylethenyl]phenyl]-
3,4-diphenyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:173435 CAPLUS
DOCUMENT NUMBER: 138:221606
TITLE: Preparation of substituted 2-(1,1-dioxoperhydro-1,4-thiazepin-7-yl)acetamides for treating inflammatory respiratory diseases
INVENTOR(S): Oku, Takuma; Hirayama, Yoshitaka; Yamagami, Kaoru; Ohkubo, Yoshitaka; Matsuoka, Hideaki
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 495 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003018019 | A2 | 20030306 | WO 2002-JP8443 | 20020821 |
| WO 2003018019 | A3 | 20031204 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002313591 | A1 | 20030310 | AU 2002-313591 | 20020821 |
| PRIORITY APPLN. INFO.: | | | AU 2001-7262 | A 20010824 |
| | | | WO 2002-JP8443 | W 20020821 |

OTHER SOURCE(S): MARPAT 138:221606
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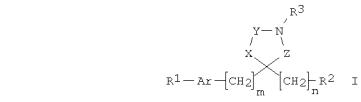
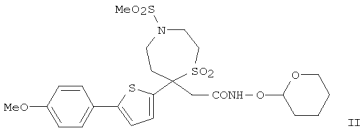
L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)





AB The title compds. [I and the like; R1 = halo, alkoxy, aryl, etc.; R2 = (un)protected CO2H, amidated CO2H; R3 = H, acyl; Ar = aryl, heterocyclyl; X = S, SO, SO2; Y, Z = alkylene; m, n = 0-2], useful for the treatment of inflammatory respiratory disease, were prepared Thus, mesylation of

N-(2-tetrahydropyranyloxy)-2-[7-(5-bromo-2-thienyl)-1,1-dioxoperhydro-1,4-thiazepin-7-yl]acetamide followed by coupling intermediate with 4-methoxyphenylboronic acid in the presence of Pd(PPh3)4 in 1,2-dimethoxyethane afforded II.

IT 355842-94-3P 355842-97-6P 355843-16-2P
355843-49-1P 355844-41-6P 355844-47-2P
355844-48-3P 355844-65-4P 355845-06-6P
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355845-72-6P 355845-73-7P 355845-75-9P
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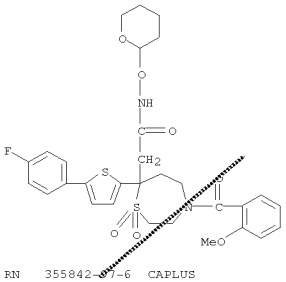
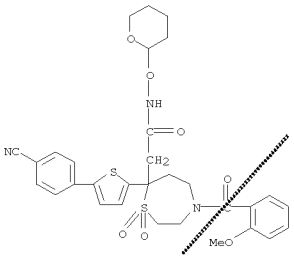
355846-78-5P 355846-79-6P 355846-81-0P
355846-91-2P 355846-95-6P 355847-76-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted 2-(1,1-dioxoperhydro-1,4-thiazepin-7-yl)acetamides for treating inflammatory respiratory diseases)

RN 355842-94-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
7-[5-(4-fluorophenyl)-2-thienyl]hexahydro-4-(2-methoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA
INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

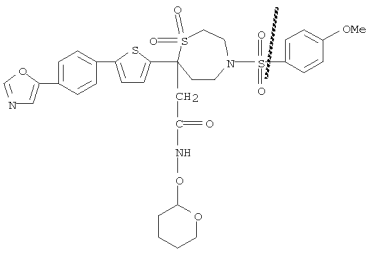


RN 355842-97-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
7-[5-(4-cyanophenyl)-2-thienyl]hexahydro-4-(2-methoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA
INDEX NAME)

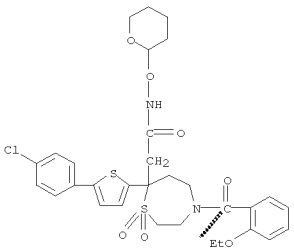


RN 355843-16-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-[(4-methoxyphenyl)sulfonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

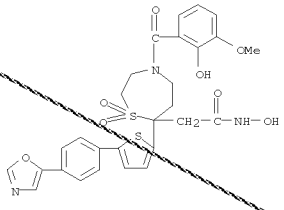


RN 355843-49-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]-4-(2-ethoxybenzoyl)hexahydro-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

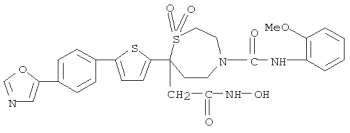


RN 355844-41-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(4-methoxybenzoyl)-7-[5-[3-[[(methylamino)carbonyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

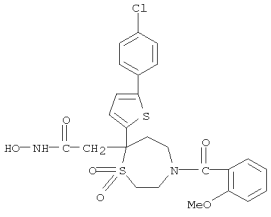
L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 355844-65-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-[[(2-methoxyphenyl)amino]carbonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

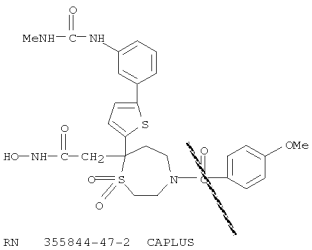


RN 355845-06-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

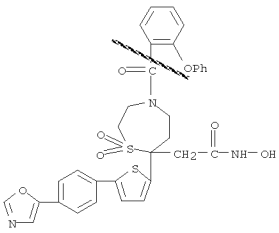


RN 355845-27-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-ethylphenyl)-2-thienyl]hexahydro-N-

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

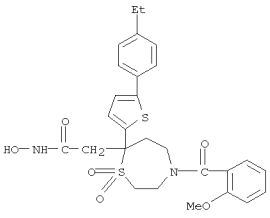


RN 355844-47-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2-phenoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

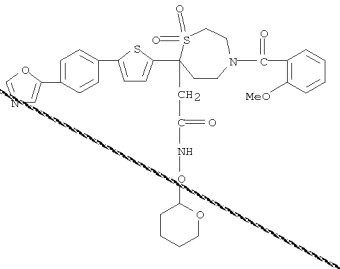


RN 355844-48-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(2-hydroxy-3-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI)
(CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

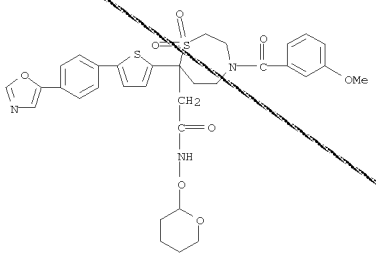


RN 355845-42-0 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(2-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

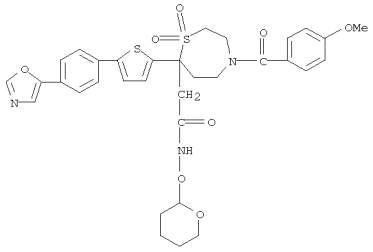


RN 355845-43-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(3-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

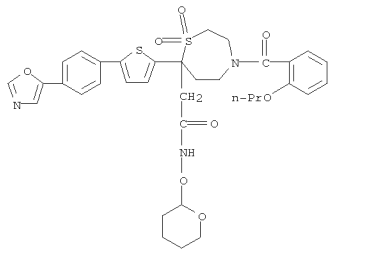


RN 355845-44-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(4-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

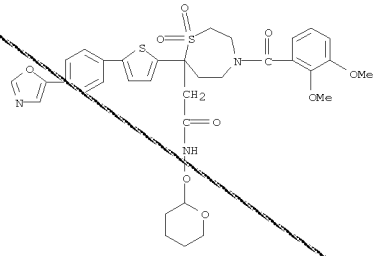


RN 355845-52-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2-propoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

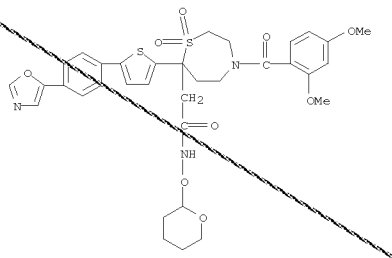


RN 355845-63-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,3-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

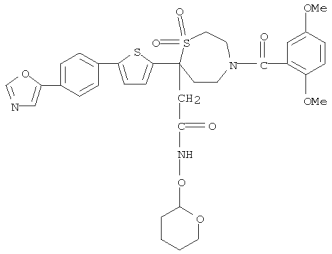


RN 355845-64-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,4-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

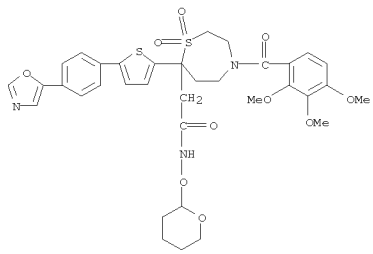


RN 355845-69-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,5-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

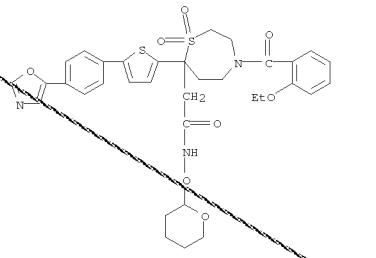


RN 355845-70-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-4-(2,3,4-trimethoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

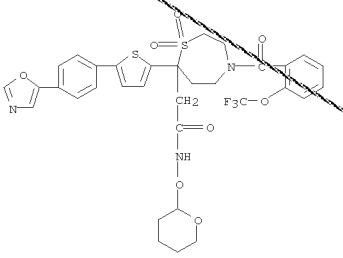


RN 355845-72-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2-ethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

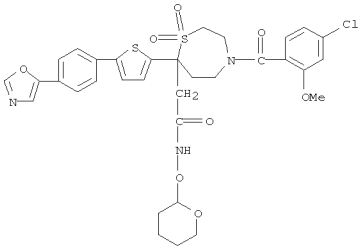


RN 355845-73-7 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-4-[2-(trifluoromethoxy)benzoyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

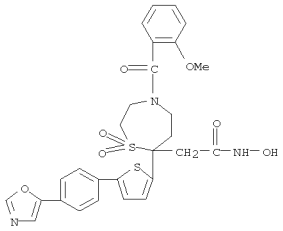


RN 355845-75-9 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
4-(4-chloro-2-methoxybenzoyl)hexahydro-7-[5-[4-
(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-,
1,1-dioxide (9CI) (CA INDEX NAME)



RN 355846-00-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-7-[5-
[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 355846-01-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
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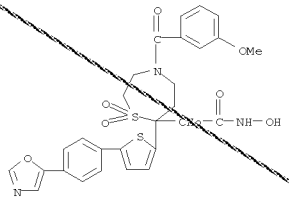

RN 355846-02-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
hexahydro-N-hydroxy-4-(4-methoxybenzoyl)-7-[5-
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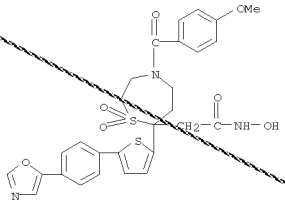
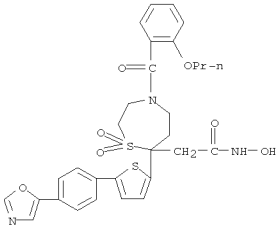
L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

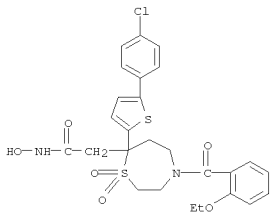


RN 355846-10-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-
oxazolyl)phenyl]-2-thienyl]-4-(2-propoxybenzoyl)-, 1,1-dioxide (9CI) (CA
INDEX NAME)

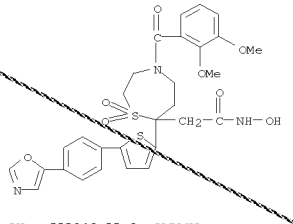


RN 355846-18-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]-4-(2-
ethoxybenzoyl)hexahydro-N-hydroxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

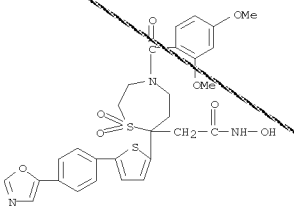


RN 355846-52-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
4-(2,3-dimethoxybenzoyl)hexahydro-N-hydroxy-7-
[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

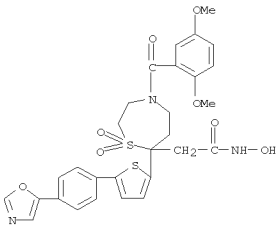


RN 355846-53-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide,
4-(2,4-dimethoxybenzoyl)hexahydro-N-hydroxy-7-
[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

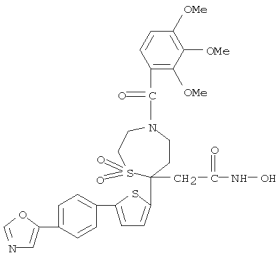


RN 355846-75-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,5-dimethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

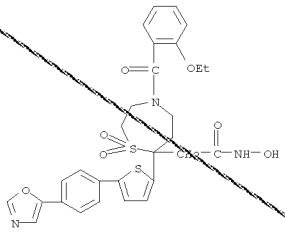


RN 355846-76-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2,3,4-trimethoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

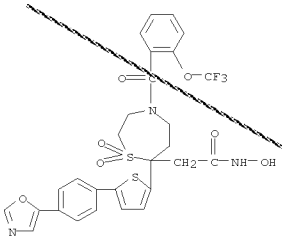


RN 355846-78-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2-ethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

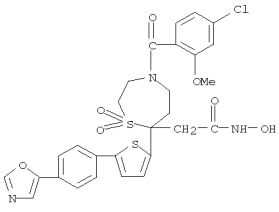


RN 355846-79-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-[2-(trifluoromethoxy)benzoyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

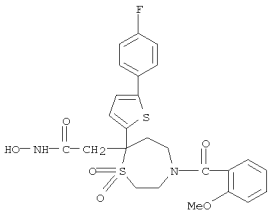


RN 355846-81-0 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(4-chloro-2-methoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

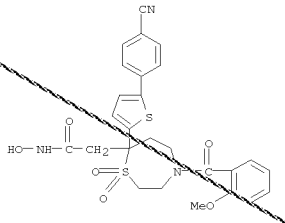


RN 355846-91-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-fluorophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

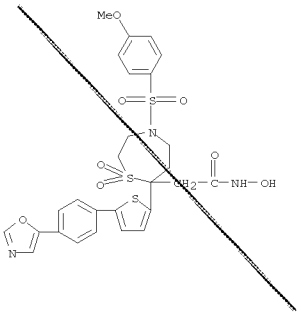


RN 355846-95-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-cyanophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)



RN 355847-76-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-[(4-methoxyphenyl)sulfonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 105 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



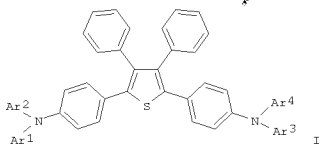
L19 ANSWER 106 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:94718 CAPLUS
DOCUMENT NUMBER: 138:144850
TITLE: Organic electroluminescent element
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Tanabe, Yoshimitsu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2003036978 | A | 20030207 | JP 2001-218944 | 20010719 |

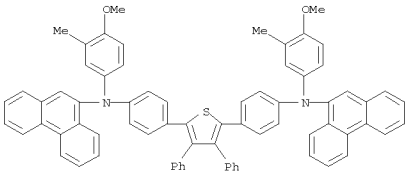
PRIORITY APPLN. INFO.: JP 2001-218944 20010719

OTHER SOURCE(S): MARPAT 138:144850
GI



AB The invention refers to an electroluminescent device comprising the thiophene derivative I [Ar1-4 = (un)substituted aryl, wherein Ar1,2 and Ar3,4 may join together to form a heterocyclic ring, but at least one of Ar1-4 is an (un)substituted phenanthryl].
IT 494759-82-9
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent element using phenanthryl thiophene derivative)
RN 494759-82-9 CAPLUS
CN 9-Phenanthrenamine, N,N'-[(3,4-diphenyl-2,5-thiophenediyl)di-4,1-phenylene]bis[N-(4-methoxy-3-methylphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 106 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 107 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:964342 CAPLUS
DOCUMENT NUMBER: 138:24951
TITLE: Preparation of amino acid biaryl derivatives for the treatment or prevention of flavivirus infections
INVENTOR(S): Chan, Chun Kong Laval; Bedard, Jean; Das, Sanjoy Kumar; Pereira, Oswy Z.; Shuttleworth, Steve; Siddiqui, M. Arshad; Wang, Wuyi
PATENT ASSIGNEE(S): Shire Biochem Inc., Can.; Nguyen Ba, Nghe
SOURCE: PCT Int. Appl., 141 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002100846 | A1 | 20021219 | WO 2002-CA877 | 20020611 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2449999 | A1 | 20021219 | CA 2002-2449999 | 20020611 |
| AU 2002344855 | A1 | 20021223 | AU 2002-344855 | 20020611 |
| US 2003229053 | A1 | 20031211 | US 2002-166030 | 20020611 |
| US 6887877 | B2 | 20050503 | | |
| EP 1395571 | A1 | 20040310 | EP 2002-742564 | 20020611 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2005500287 | T | 20050106 | JP 2003-503614 | 20020611 |

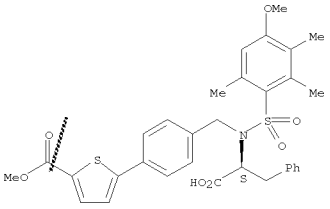
PRIORITY APPLN. INFO.: US 2001-296732P P 20010611
WO 2002-CA877 W 20020611

OTHER SOURCE(S): MARPAT 138:24951
AB Novel compds. R4-Z-Y-N(M-R3)CR1R2-A1-A [M = SO2, CO, CS, CH2CO, COCH2O, CO2, CH2, or alkylmethylene; A1 = a bond, alkyl, alkenyl, or alkynyl; A = CO2R5, COCO2R5, PO3R52, SO3R5, tetrazolyl, CONR5CHR5CO2R5, CONR52, CONR5OH (R5 = H or alkyl); R1, R2 = H, alkyl, aryl, heterocyclyl, aralkyl, or heteroaralkyl; R3 = aryl, heterocyclyl, aralkyl, or heteroaralkyl; Y = CH2, CO, CH2CO, NH, or a bond; Z = alkyl, alkenyl, alkynyl, aryl, or heterocyclyl; R4 = H, halo, CN, NO2, alkyl, aryl, heterocyclyl, aralkyl, heteroaralkyl, NR52, SO2Me, alkoxy, aryloxy, aralkyloxy, or COR7, where R7 = aryl or heterocyclyl, with the proviso that the compound is other than 3-[3-(2,6-dichloropyridin-4-yl)-1-(4-thiophen-2-ylbenzyl)ureido]-3-thiophen-2-ylpropionic acid] or their pharmaceutically-acceptable salts were prepared for treating Flaviviridae viral infection. Thus,

2-[(2,4-dichlorobenzoyl)[3-(3,5-difluorophenyl)thiophen-2-ylmethyl]amino]-3-phenylpropionic acid was prepared from 2-amino-3-phenylpropionic acid tert-Bu ester by reductive acylation with 3-bromothiophene-2-

L19 ANSWER 107 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
carboxaldehyde, acylation with 2,4-dichlorobenzoyl chloride, arylation with 3,5-difluorophenylzinc chloride, and ester cleavage with TFA. The product showed IC50 < 5 μM in the hepatitis C virus RNA-dependent polymerase assay.
IT 478294-43-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino acid biaryl derivs. for treatment or prevention of
flavivirus infections)
RN 478294-43-8 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[4-[[[(1S)-1-carboxy-2-phenylethyl][(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]phenyl]-, 2-methyl ester (9CI) (CA INDEX NAME)

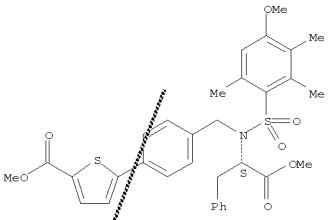
Absolute stereochemistry.



IT 478296-34-3P 478296-35-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of amino acid biaryl derivs. for treatment or prevention of
flavivirus infections)
RN 478296-34-3 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[4-[[[(1S)-2-methoxy-2-oxo-1-(phenylmethyl)ethyl][(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]phenyl]-, methyl ester (9CI) (CA INDEX NAME)

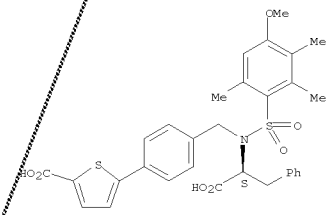
Absolute stereochemistry.

L19 ANSWER 107 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 478296-35-4 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-[4-[[[(1S)-1-carboxy-2-phenylethyl][(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

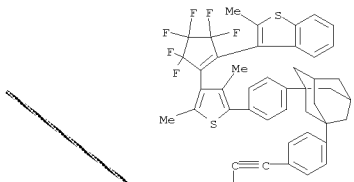


REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

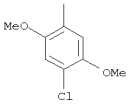
L19 ANSWER 108 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:893949 CAPLUS
DOCUMENT NUMBER: 139:188188
TITLE: Fluorescence switching of photochromic diarylethenes
AUTHOR(S): Kawai, Tsuyoshi; Kim, Myeong-Suk; Sasaki, Takatoshi; Irie, Masahiro
CORPORATE SOURCE: Japan Science and Technology Corporation, Graduate School of Engineering, Department of Chemistry and Biochemistry, Kyushu University and CREST, Higashi-ku,
Fukuoka, 812-8581, Japan
SOURCE: Optical Materials (Amsterdam, Netherlands) (2003), 21(1-3), 275-278
CODEN: OMATET; ISSN: 0925-3467
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fluorescence switching performance of photochromic diarylethenes has been studied. A bisbenzothienylethene having m-terphenyl substituents underwent reversible photochromic reactions in the amorphous solid state and exhibited fluorescence intensity change and shift of the emission band
with the photochromic reaction. A diarylethene connected with a fluorescent 9,10-bis(phenylethynyl)anthracene unit through an adamantyl unit shows reversible fluorescence intensity change with the photochromic reactions of the diarylethenes.
IT 579512-51-9P
RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(fluorescence switching of photochromic diarylethenes)
RN 579512-51-9 CAPLUS
CN Benzo[b]thiophene, 3-[2-[5-[4-[3-[4-[[10-[(4-chloro-2,5-dimethoxyphenyl)ethynyl]-9-anthracenyl]ethynyl]phenyl]tricyclo[3.3.1.13,7]dec-1-yl]phenyl]-2,4-dimethyl-3-thienyl]-3,3,4,4,5,5-hexafluoro-1-cyclopenten-1-yl]-2-methyl- (9CI) (CA INDEX NAME)

L19 ANSWER 108 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



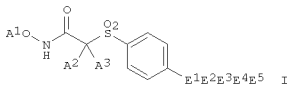
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 109 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:888730 CAPLUS
DOCUMENT NUMBER: 137:384747
TITLE: Preparation of arylsulfonylpyranhydroxamates as matrix
metalloprotease and/or aggrecanase inhibitors
INVENTOR(S): Barta, Thomas E.; Becker, Daniel P.; Bedell, Louis J.;
Boehm, Terri L.; Fobian, Yvette M.; Freskos, John N.; Hockerman, Susan L.; Kassab, Darren J.; Kolodziej, Steve A.; McDonald, Joseph J.; Norton, Monica B.; Rico, Joseph G.; Talley, John J.; Villamil, Clara I.; Wang, Tijuan Jane
PATENT ASSIGNEE(S): Pharmacia Corporation, USA
SOURCE: PCT Int. Appl., 627 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002092588 | A2 | 20021121 | WO 2002-US15257 | 20020510 |
| WO 2002092588 | A3 | 20030227 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2446586 | A1 | 20021121 | CA 2002-2446586 | 20020510 |
| AU 2002259212 | A1 | 20021125 | AU 2002-259212 | 20020510 |
| EP 1385836 | A2 | 20040204 | EP 2002-729204 | 20020510 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2002009525 | A | 20040309 | BR 2002-9525 | 20020510 |
| HU 200304069 | A2 | 20040428 | HU 2003-4069 | 20020510 |
| JP 2004530691 | T | 20041007 | JP 2002-589473 | 20020510 |
| CN 1764655 | A | 20060426 | CN 2002-809672 | 20020510 |
| ZA 2003008525 | A | 20050217 | ZA 2003-8525 | 20030131 |
| BG 108285 | A | 20040930 | BG 2003-108285 | 20031023 |
| IN 2003CN01720 | A | 20051118 | IN 2003-CN1720 | 20031030 |
| NO 2003004995 | A | 20031216 | NO 2003-4995 | 20031110 |
| MX 2003PA10326 | A | 20040730 | MX 2003-PA10326 | 20031111 |
| US 2005101641 | A1 | 20050512 | US 2004-992483 | 20041117 |
| PRIORITY APPLN. INFO.: | | | US 2001-290375P P | 20010511 |
| | | | US 2002-142737 A3 | 20020510 |
| | | | WO 2002-US15257 W | 20020510 |

L19 ANSWER 109 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
US 2003-657034 A3 20030905

OTHER SOURCE(S): MARPAT 137:384747
GI

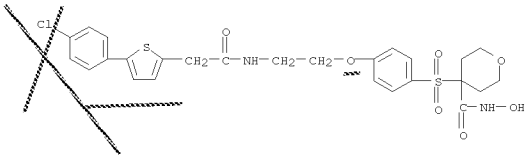


AB Title compds. [I; A1 = H, (substituted) alkylcarbonyl, alkoxycarbonyl, carbocyclylcarbonyl, heterocyclylcarbonyl, aminoalkylthiocarbonyl, etc.; A2A3C = (substituted) heterocyclyl; E1 = O, S, SO, SO2, NR1, CONR1, CR1R2;
E2 = (substituted) alkyl, cycloalkyl, alkylcycloalkyl, cycloalkylalkyl, alkylcycloalkylalkyl; E3 = CO, O2C, CNR3, NR4, NR4SO2, S, SO, etc.; E4 = bond, (substituted) alkyl, alkenyl; E5 = H, OH, (substituted) alkyl, alkenyl, alkynyl, alkoxy, alkoxyalkyl, carbocyclyl, heterocyclyl; R1, R2 =
H, (substituted) alkyl; with provisos], were prepared Thus, tetrahydro-4-[[4-[[5-(4-methoxyphenyl)-5-oxopentyl]oxy]phenyl]sulfonyl]-2H-pyran-4-carboxylic acid 1,1-dimethylethyl ester (preparation given) in CH2Cl2 was treated with Me3SiCN and ZnI2 to give 81% cyanohydrin. The product in DMF was treated with 1-hydroxybenzotriazole, 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride, N-methylmorpholine, and tetrahydropyranhydroxylamine to give 70% THP-protected hydroxamate. The latter was stirred with aqueous HCl in dioxane/MeOH to give 59% 4-[[4-[[(4Z)-5-cyano-5-(4-methoxyphenyl)-4-pentenyl]oxy]phenyl]sulfonyl]tetrahydro-N-hydroxy-2H-pyran-4-carboxamide. This inhibited MMP-13 with IC50 = 0.2 nM.

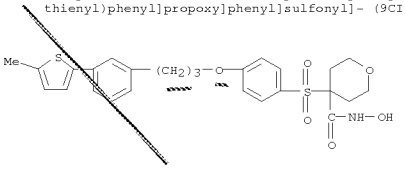
IT 476183-89-8P 476186-47-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of arylsulfonylpyranhydroxamates as matrix
metalloprotease and/or aggrecanase inhibitors)

RN 476183-89-8 CAPLUS
CN 2H-Pyran-4-carboxamide, 4-[[4-[2-[[[5-(4-chlorophenyl)-2-thienyl]acetyl]amino]ethoxy]phenyl]sulfonyl]tetrahydro-N-hydroxy- (9CI) (CA INDEX NAME)

L19 ANSWER 109 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



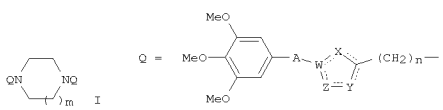
RN 476186-47-7 CAPLUS
CN 2H-Pyran-4-carboxamide, tetrahydro-N-hydroxy-4-[[4-[3-[3-(5-methyl-2-thienyl)phenyl]propoxy]phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 110 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:830253 CAPLUS
DOCUMENT NUMBER: 137:325446
TITLE: Preparation of bis(trimethoxyphenylazolylalkyl)(homo)piperazines as cell adhesion inhibitors.
INVENTOR(S): Kodama, Tatsuhiko; Tamura, Masahiro; Oda, Toshiaki; Yamazaki, Yukiyoshi; Nishikawa, Masahiro; Doi, Takeshi; Kyotani, Yoshinori
PATENT ASSIGNEE(S): Kowa Co., Ltd., Japan
SOURCE: U.S., 23 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 6472386 | B1 | 20021029 | US 2001-893682 | 20010629 |
| CA 2451238 | A1 | 20030109 | CA 2002-2451238 | 20020627 |
| WO 2003002540 | A1 | 20030109 | WO 2002-JP6488 | 20020627 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002311277 | A1 | 20030303 | AU 2002-311277 | 20020627 |
| EP 1400515 | A1 | 20040324 | EP 2002-736187 | 20020627 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| CN 1522250 | A | 20040818 | CN 2002-813110 | 20020627 |
| PRIORITY APPLN. INFO.: | | | US 2001-893682 A | 20010629 |
| | | | WO 2002-JP6488 W | 20020627 |

OTHER SOURCE(S): MARPAT 137:325446
GI



AB Title compds. [I; A = bond, C.tplbond.C, CONH NHCO; W = C, N; X = CH, N, O, S; Y = CH, CHR1, in which R1 = H, alkyl, hydroxyalkyl, alkoxyalkyl, aryl, aralkyl, heteroarylalkyl, N, O, S, NR2; R2 = H, alkyl, hydroxyalkyl,
alkoxyalkyl, aryl, aralkyl, heteroarylalkyl; Z = N, O, S, CH, NR3; R3 = H,

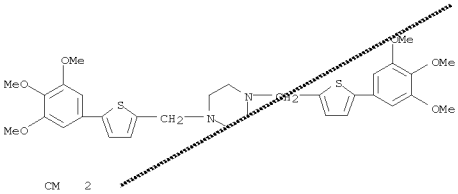
L19 ANSWER 110 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
alkyl, hydroxyalkyl, alkoxyalkyl, aryl, aralkyl, heteroarylalkyl; m = 1, 2; n = 1-5, with the proviso that 1 or 2 of W, X, Y Z = heteroatoms], were prepd. Thus, 4-chloromethyl-2-(3,4,5-trimethoxyphenyl)thiazole (prepn. given), piperazine, K2CO3, and KI were stirred 5 h in DMF to give 33% N,N'-bis[[2-(3,4,5-trimethoxyphenyl)thiazol-4-yl]methyl]piperazine. I at 1 μM inhibited TNFα-stimulated binding of U937 cells to HUVEC by 45-60%. Drug formulations contg. the latter are given. The compds. have inhibitory effects on cell adhesion and are useful for prevention or treatment of diseases such as allergy, asthma, rheumatism, arteriosclerosis and inflammation.

IT 473844-14-3P 473844-16-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bis(trimethoxyphenylazolylalkyl)(homo)piperazines as cell adhesion inhibitors)

RN 473844-14-3 CAPLUS
CN Piperazine, 1,4-bis[[5-(3,4,5-trimethoxyphenyl)-2-thienyl]methyl]-, (2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

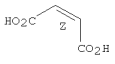
CRN 473844-13-2
CMF C32 H38 N2 O6 S2



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

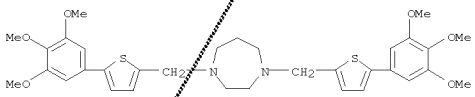


RN 473844-16-5 CAPLUS
CN 1H-1,4-Diazepine, hexahydro-1,4-bis[[5-(3,4,5-trimethoxyphenyl)-2-

L19 ANSWER 110 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thienyl]methyl]-, (2Z)-2-butenedioate (1:2) (9CI) (CA INDEX NAME)

CM 1

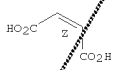
CRN 473844-15-4
CMF C33 H40 N2 O6 S2



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



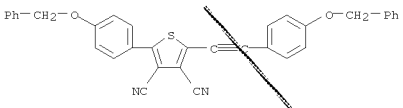
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 111 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:816702 CAPLUS
DOCUMENT NUMBER: 138:47633
TITLE: Effects of Desymmetrization on Thiophene-Based Bent-Rod Mesogens
AUTHOR(S): Paraskos, Alexander J.; Swager, Timothy M.
CORPORATE SOURCE: Department of Chemistry and Center for Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Chemistry of Materials (2002), 14(11), 4543-4549
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The synthesis and characterization of various thiophene-based bent-rod liquid crystals are reported, and the effects of varying lateral dipole and core desymmetrization upon mesophase behavior are described. Incorporation of desymmetrized core 7 into the mol. framework has very different consequences depending upon whether n-alkoxy or tetracatenar-type end groups were used. Tetracatenar-type mesogens 8-11 are significantly less mesogenic than the previously reported sym. series 3. When sym. straight-chain compds. 13-17 and unsym. straight-chain compds. 18-21 were studied, however, the desymmetrized core gave rise to mesophases with much broader temperature ranges. Variable temperature x-ray diffraction of these compds. suggests the formation of antiparallel dimers of mols. within the liquid crystal phase, and this may explain the relatively stable mesophases formed by these compds. and their incompatibility with chiral induction. The effects of altering the lateral substituents were also explored, and 3,4-difluorothiophene-based compds. 24-27 exhibit broad nematic mesophases.

IT 478678-57-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and dealkylation of)

RN 478678-57-8 CAPLUS
CN 3,4-Thiophenedicarbonitrile, 2-[4-(phenylmethoxy)phenyl]-5-[[4-(phenylmethoxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)

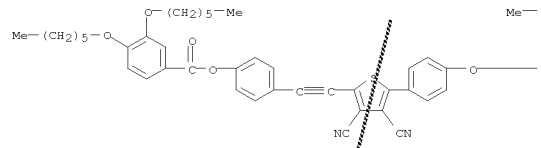


IT 478678-40-9P 478678-41-0P
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and phase transition temps. and phase transition enthalpies of)

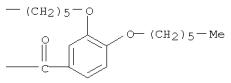
RN 478678-40-9 CAPLUS
CN Benzoic acid, 3,4-bis(hexyloxy)-, 4-[[5-[4-[[3,4-

L19 ANSWER 111 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
bis(hexyloxy)benzoyl]oxy]phenyl]-3,4-dicyano-2-thienyl]ethynyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

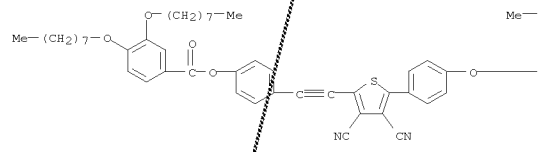


PAGE 1-B

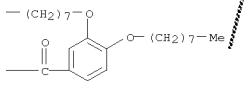


RN 478678-41-0 CAPLUS
CN Benzoic acid, 3,4-bis(octyloxy)-, 4-[[5-[4-[[3,4-bis(octyloxy)benzoyl]oxy]phenyl]-3,4-dicyano-2-thienyl]ethynyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



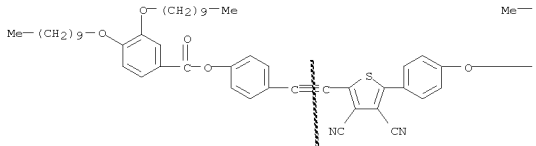
PAGE 1-B



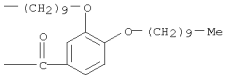
IT 478678-42-1P 478678-43-2P 478678-47-6P 478678-48-7P 478678-49-8P 478678-50-1P

L19 ANSWER 111 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
(Physical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(prepn., liq. crystal properties and phase transition enthalpies of)
RN 478678-42-1 CAPLUS
CN Benzoic acid, 3,4-bis(decyloxy)-, 4-[[5-[4-[[3,4-bis(decyloxy)benzoyl]oxy]phenyl]-3,4-dicyano-2-thienyl]ethynyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

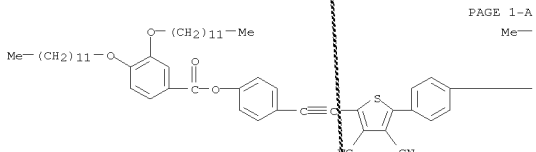


PAGE 1-B

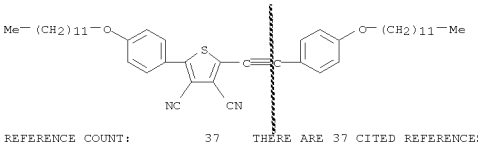


RN 478678-43-2 CAPLUS
CN Benzoic acid, 3,4-bis(dodecyloxy)-, 4-[[5-[4-[[3,4-bis(dodecyloxy)benzoyl]oxy]phenyl]-3,4-dicyano-2-thienyl]ethynyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

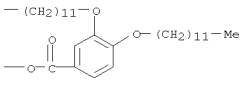


L19 ANSWER 111 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

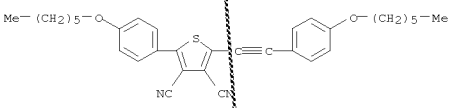


REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

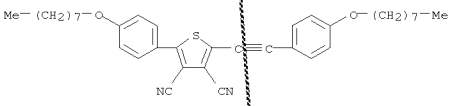
L19 ANSWER 111 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
PAGE 1-B



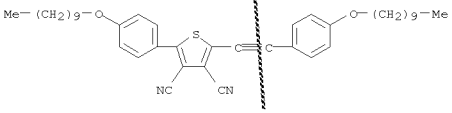
RN 478678-47-6 CAPLUS
CN 3,4-Thiophenedicarbonitrile, 2-[4-(hexyloxy)phenyl]-5-[[4-(hexyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)



RN 478678-48-7 CAPLUS
CN 3,4-Thiophenedicarbonitrile, 2-[4-(octyloxy)phenyl]-5-[[4-(octyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)



RN 478678-49-8 CAPLUS
CN 3,4-Thiophenedicarbonitrile, 2-[4-(decyloxy)phenyl]-5-[[4-(decyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)



RN 478678-50-1 CAPLUS
CN 3,4-Thiophenedicarbonitrile, 2-[4-(dodecyloxy)phenyl]-5-[[4-(dodecyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 112 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

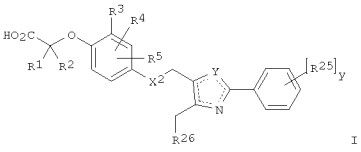
| | |
|---|---|
| ACCESSION NUMBER: | 2002:575057 CAPLUS |
| DOCUMENT NUMBER: | 137:140514 |
| TITLE: | Preparation of thiazole and oxazole derivatives as activators of human peroxisome proliferator activated receptors |
| INVENTOR(S): | Banker, Pierette; Cadilla, Rodolfo; Lambert, Millard Hurst, III; Rafferty, Stephen William; Sternbach, Daniel David; Sznaidman, Marcos Luis |
| PATENT ASSIGNEE(S): | Glaxo Group Limited, UK |
| SOURCE: | PCT Int. Appl., 138 pp.<br>CODEN: PIXXD2 |
| DOCUMENT TYPE: | Patent |
| LANGUAGE: | English |
| FAMILY ACC. NUM. COUNT: | 1 |
| PATENT INFORMATION: | |

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002059098 | A1 | 20020801 | WO 2001-US51056 | 20011219 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 2002246903 | A1 | 20020806 | AU 2002-246903 | 20011219 |
| EP 1349843 | A1 | 20031008 | EP 2001-994514 | 20011219 |
| EP 1349843 | B1 | 20050420 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2004520377 | T | 20040708 | JP 2002-559400 | 20011219 |
| AT 293611 | T | 20050515 | AT 2001-994514 | 20011219 |
| PT 1349843 | T | 20050930 | PT 2001-994514 | 20011219 |
| ES 2240558 | T3 | 20051016 | ES 2001-1994514 | 20011219 |
| US 2004072838 | A1 | 20040415 | US 2003-451295 | 20031031 |
| US 2007072871 | A1 | 20070329 | US 2006-550060 | 20061017 |
| US 7229998 | B2 | 20070612 | | |

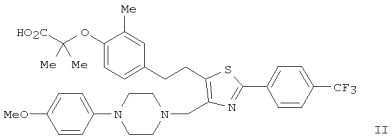
| | | | |
|---|---|---|---|
| PRIORITY APPLN. INFO.: | GB 2000-31103 | A | 20001220 |
| | WO 2001-US51056 | W | 20011219 |
| | US 2003-451295 | B1 | 20031031 |

OTHER SOURCE(S): MARPAT 137:140514
GI

L19 ANSWER 112 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I



II

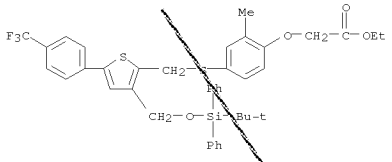
AB The title compds. [I; R1, R2 = H, alkyl; X2 = O, S, CH2; R3-R5 = H, alkyl, OMe, CF3, OCF3, CN, allyl, halo; Y = S, O; R25 = Me, OMe, CF3, halo; y = 0-5; R26 = substituted piperazino, piperidino, morpholino, etc.] which activate human peroxisome proliferator activated receptors (hPPARs) and are useful for the treatment of associated disorders such as cardiovascular disease and hypercholesteremia, were prepared Thus, reacting 4-(2-{4-{[4-(4-methoxyphenyl)-1-piperazinyl]methyl}-2-(4-trifluoromethylphenyl)-1,3-thiazol-5-yl}ethyl)-2-methylphenol (preparation given) with 2-trichloromethyl-2-propanol in the presence of NaOH pellets in acetone afforded 40% II. All exemplified compds. I were agonists of at least one hPPAR subtype (no data given).

IT 444613-76-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of thiazole and oxazole derivs. as activators of human peroxisome proliferator activated receptors)

RN 444613-76-7 CAPLUS

CN Acetic acid, [4-[[[3-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-5-[4-(trifluoromethyl)phenyl]-2-thienyl]methyl]thio]-2-methylphenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 112 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 113 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:424635 CAPLUS
DOCUMENT NUMBER: 137:140869
TITLE: Functionalizable Polycyclic Aromatics through Oxidative Cyclization of Pendant Thiophenes
AUTHOR(S): Tovar, John D.; Rose, Aimee; Swager, Timothy M.
CORPORATE SOURCE: Department of Chemistry and the Center for Materials Science and Engineering, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Journal of the American Chemical Society (2002), 124(26), 7762-7769
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We present a general strategy for obtaining large sulfur-containing polycyclic aroms. from thienyl precursors through iron(III) chloride mediated oxidative cyclizations. By placing thienyl moieties in close proximity to adjacent arenes, we have directed the oxidized intermediates into controlled cyclization pathways, effectively suppressing polymer formation. Utilizing these cyclized compds. and their thienyl precursors, we have studied cyclization/polymerization pathways of polymers such as poly(2). The unsubstituted positions α to the sulfur atoms within these aromatic cores allowed for efficient halogenation and further functionalization. As a demonstration, we prepared a series of arylene-ethynylene polymers with varying degrees of chromophore aromatization and used them to probe the effects of synthetically imposed rigidity on polymer photophys. behavior. The symmetries and effective conjugation pathways within the monomers play a key role in determining photophys. properties. We observed that rigid, aromatized chromophores generally led to increased excited-state lifetimes by decreasing radiative rates of fluorescence decay.

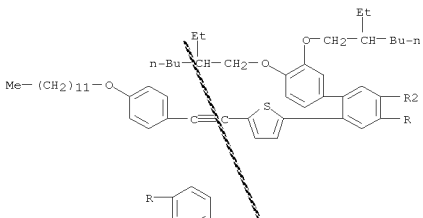
IT 444922-05-8P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(functionalizable polycyclic aroms. through oxidative cyclization of pendant thiophenes)

RN 444922-05-8 CAPLUS

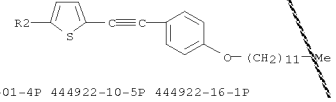
CN Thiophene, 2,2'-[3,3'',4,4''-tetrakis[(2-ethylhexyl)oxy][1,1':4',1''-terphenyl]-2',5'-diyl]bis[5-[[4-(dodecyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 113 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



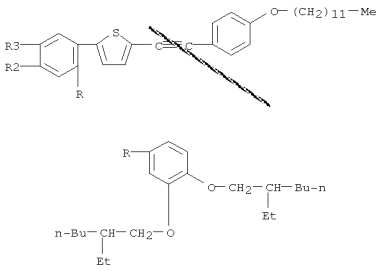
IT 444922-01-4P 444922-10-5P 444922-16-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(functionalizable polycyclic aroms. through oxidative cyclization of pendant thiophenes)

RN 444922-01-4 CAPLUS

CN Thiophene, 2,2'-[3,3'',4,4''-tetrakis[(2-ethylhexyl)oxy][1,1':3',1''-terphenyl]-4',6'-diyl]bis[5-[[4-(dodecyloxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 113 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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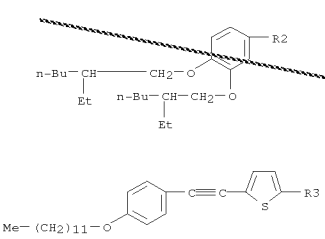
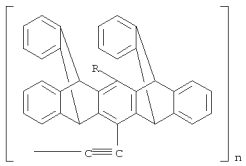


RN 444922-10-5 CAPLUS
CN Poly[2,5-thiophenediyl[3,3'',4,4''-tetrakis[(2-ethylhexyl)oxy][1,1':4',1''-terphenyl]-2',5'-diyl]-2,5-thiophenediyl-1,2-ethynediyl(5,7,12,14-tetrahydro-5,14[1',2']:7,12[1'',2'']-dibenzenopentacene-6,13-diyl)-1,2-ethynediyl] (9CI) (CA INDEX NAME)

L19 ANSWER 113 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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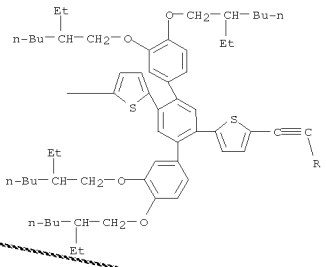
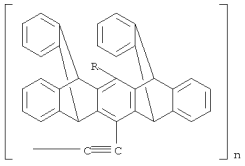


RN 444922-16-1 CAPLUS
CN Poly[2,5-thiophenediyl[3,3'',4,4''-tetrakis[(2-ethylhexyl)oxy][1,1':3',1''-terphenyl]-4',6'-diyl]-2,5-thiophenediyl-1,2-ethynediyl(5,7,12,14-tetrahydro-5,14[1',2']:7,12[1'',2'']-dibenzenopentacene-6,13-diyl)-1,2-ethynediyl] (9CI) (CA INDEX NAME)

L19 ANSWER 113 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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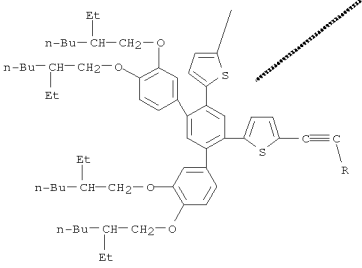
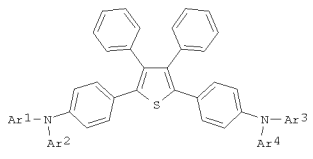


REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 114 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:193377 CAPLUS
DOCUMENT NUMBER: 136:270226
TITLE: Organic electroluminescent devices containing naphthylbiphenylaminophenyldiphenylthiophine derivatives
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

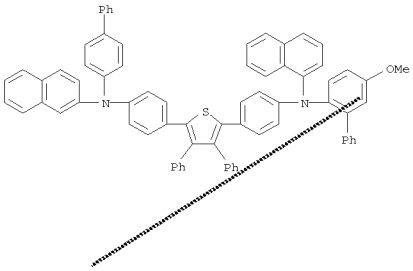
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2002075650 | A | 20020315 | JP 2000-259042 | 20000829 |
| PRIORITY APPLN. INFO.: | | | JP 2000-259042 | 20000829 |

OTHER SOURCE(S): MARPAT 136:270226
GI



AB The invention relates to an organic electroluminescent device comprising a pair of electrodes sandwiching ≥1 layer(s) containing ≥1 general compound I [Ar1, Ar3 = (un)substituted biphenyl; Ar2, Ar4 = (un)substituted naphthyl].
IT 404392-80-9
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing naphthylbiphenylaminophenyldiphenylthiophine derivs.)
RN 404392-80-9 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-([1,1'-biphenyl]-4-yl-2-naphthalenylamino)phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-(5-methoxy[1,1'-biphenyl]-2-yl)- (9CI) (CA INDEX NAME)

L19 ANSWER 114 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

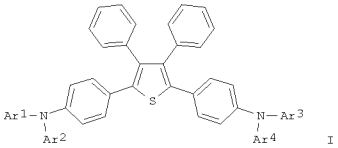


L19 ANSWER 115 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:193376 CAPLUS
DOCUMENT NUMBER: 136:254352
TITLE: Organic electroluminescent devices containing bisphenylaminophenyldiphenylthiophine derivatives
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2002075649 | A | 20020315 | JP 2000-259041 | 20000829 |
| PRIORITY APPLN. INFO.: | | | JP 2000-259041 | 20000829 |

OTHER SOURCE(S): MARPAT 136:254352
GI

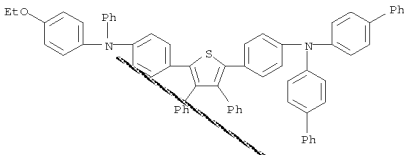


AB The invention relates to an organic electroluminescent device comprising a pair of electrodes sandwiching ≥1 layer(s) containing ≥1 general compound I [Ar1-2 = (un)substituted biphenyl; Ar3-4 = (un)substituted phenyl].

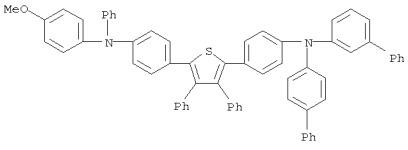
IT 404389-98-6 404390-03-0 404390-10-9 404390-16-5 404390-18-7 404390-19-8 404390-22-3 404390-25-6
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing bisphenylaminophenyldiphenylthiophine derivs.)

RN 404389-98-6 CAPLUS
CN [1,1'-Biphenyl]-4-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[(4-ethoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

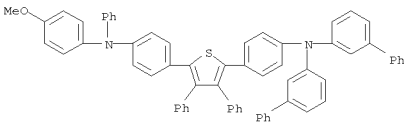
L19 ANSWER 115 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 404390-03-0 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[(4-methoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

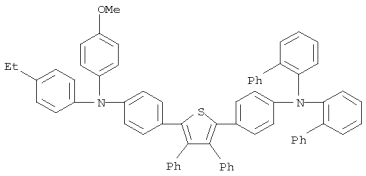


RN 404390-10-9 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-3-yl-N-[4-[5-[4-[(4-methoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

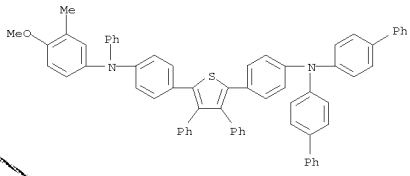


RN 404390-16-5 CAPLUS
CN [1,1'-Biphenyl]-2-amine, N-[1,1'-biphenyl]-2-yl-N-[4-[5-[4-[(4-ethylphenyl)(4-methoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

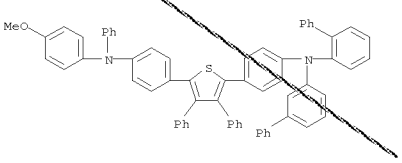
L19 ANSWER 115 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 404390-18-7 CAPLUS
CN [1,1'-Biphenyl]-4-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[(4-methoxy-3-methylphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

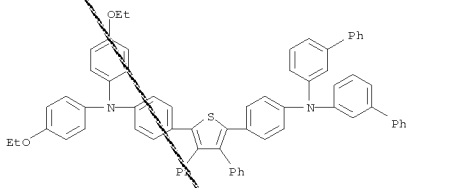


RN 404390-19-8 CAPLUS
CN [1,1'-Biphenyl]-2-amine, N-[1,1'-biphenyl]-3-yl-N-[4-[5-[4-[(4-methoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

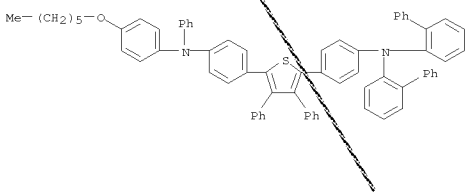


RN 404390-22-3 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-3-yl-N-[4-[5-[4-[bis(4-ethoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 115 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 404390-25-6 CAPLUS
CN [1,1'-Biphenyl]-2-amine, N-[1,1'-biphenyl]-2-yl-N-[4-[5-[4-[[4-(hexyloxy)phenyl]phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI)
(CA INDEX NAME)



L19 ANSWER 116 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:193374 CAPLUS
DOCUMENT NUMBER: 136:254350
TITLE: Organic electroluminescent devices containing bisnaphthylaminophenyldiphenylthiophine derivatives
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2002075647 | A | 20020315 | JP 2000-259039 | 20000829 |
| PRIORITY APPLN. INFO.: | | | JP 2000-259039 | 20000829 |

OTHER SOURCE(S): MARPAT 136:254350
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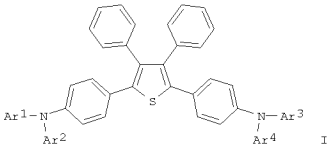
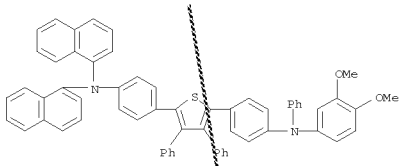
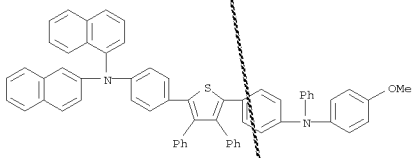


AB The invention relates to an organic electroluminescent device comprising a pair of electrodes sandwiching ≥1 layer(s) containing ≥1 general compound I [Ar1-2 = (un)substituted naphthyl; Ar3-4 = (un)substituted phenyl].
IT 404353-80-6 404353-83-9 404353-84-0 404353-96-4 404353-98-6
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing bisnaphthylaminophenyldiphenylthiophine derivs.)
RN 404353-80-6 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[(3,4-dimethoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 116 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



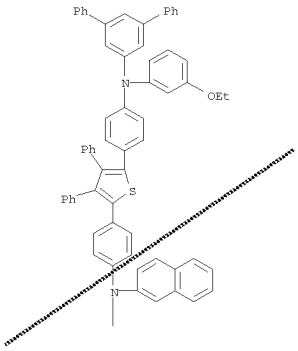
RN 404353-83-9 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[(4-methoxyphenyl)phenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)



RN 404353-84-0 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[(3-ethoxyphenyl)[1,1':3',1''-terphenyl]-5'-ylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 116 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

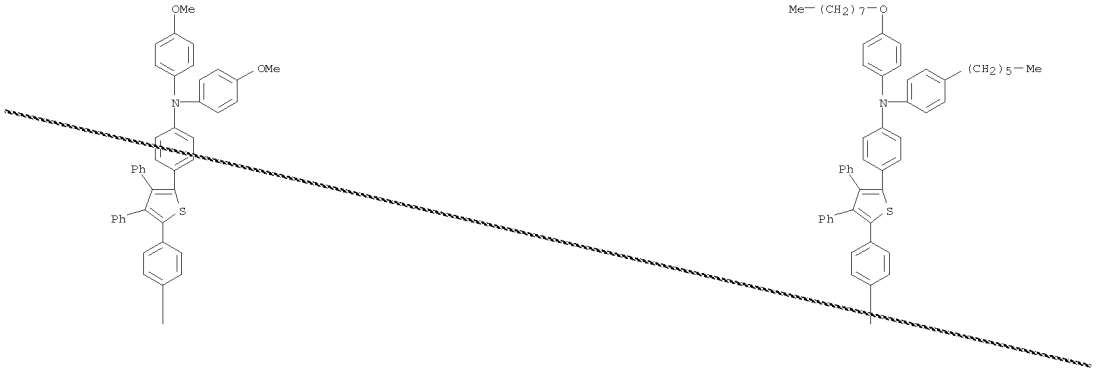


PAGE 2-A

RN 404353-96-4 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[bis(4-methoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 116 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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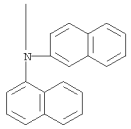


L19 ANSWER 116 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

PAGE 2-A

RN 404353-98-6 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[(4-hexylphenyl)[4-(octyloxy)phenyl]amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 117 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:183754 CAPLUS
DOCUMENT NUMBER: 136:226804
TITLE: Combination, for treating depression and anxiety, containing a 5HT1D receptor antagonist and a CNS penetrant NK-1 receptor antagonist
INVENTOR(S): Schmidt, Christopher Joseph; Sobolov-Jaynes, Susan Beth
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 58 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 1186318 | A2 | 20020313 | EP 2001-307220 | 20010824 |
| EP 1186318 | A3 | 20030326 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| US 2002049211 | A1 | 20020425 | US 2001-867357 | 20010529 |
| JP 2002121153 | A | 20020423 | JP 2001-264226 | 20010831 |
| CA 2356797 | A1 | 20020306 | CA 2001-2356797 | 20010904 |
| MX 2001PA08993 | A | 20041110 | MX 2001-PA8993 | 20010905 |
| BR 2001003913 | A | 20020521 | BR 2001-3913 | 20010906 |
| PRIORITY APPLN. INFO.: | | | US 2000-230257P P | 20000906 |

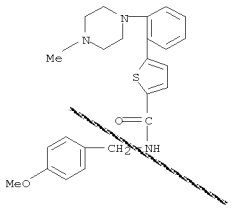
OTHER SOURCE(S): MARPAT 136:226804

AB The present invention relates to a method of treating depression or anxiety in a mammal, including a human, by administering to the mammal a CNS-penetrant NK-1 receptor antagonist (e.g., a substance P receptor antagonist) in combination with a 5HT1D receptor antagonist. It also relates to pharmaceutical compns. containing a pharmaceutically acceptable carrier, a CNS-penetrant NK-1 receptor antagonist and a 5HT1D receptor antagonist.

IT 250383-78-9
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(combination, for treating depression and anxiety, containing a 5HT1D receptor antagonist and a CNS penetrant NK-1 receptor antagonist)

RN 250383-78-9 CAPLUS
CN 2-Thiophenecarboxamide, N-[(4-methoxyphenyl)methyl]-5-[2-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 117 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

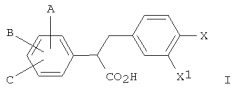


L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:142657 CAPLUS
DOCUMENT NUMBER: 136:183822
TITLE: Preparation of 2,3-diphenylpropionic acid derivatives or their salts, medicines or cell adhesion inhibitors containing the same, and their usage
INVENTOR(S): Hoshina, Yoichiro; Ikegami, Satoru; Matsuo, Atsushi; Harada, Tatsuhiro; Okuyama, Akihiko
PATENT ASSIGNEE(S): Kaken Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 162 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002014262 | A1 | 20020221 | WO 2001-JP6934 | 20010810 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| AU 200178709 | A | 20020225 | AU 2001-78709 | 20010810 |
| CA 2419008 | A1 | 20030211 | CA 2001-2419008 | 20010810 |
| EP 1325903 | A1 | 20030709 | EP 2001-956840 | 20010810 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 2004072878 | A1 | 20040415 | US 2003-344105 | 20030819 |
| PRIORITY APPLN. INFO.: | | | JP 2000-244226 A | 20000811 |
| | | | JP 2001-115840 A | 20010413 |
| | | | WO 2001-JP6934 W | 20010810 |

OTHER SOURCE(S): MARPAT 136:183822
GI

L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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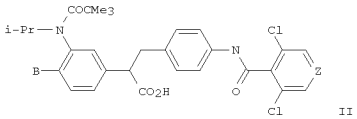
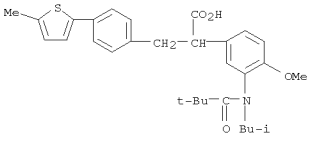


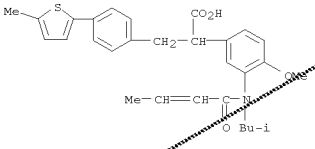
II

AB The title compds.[I; A, B, C = H, halo, NO2, cyano, OH, CO2H, alkyl, aryl, heteroaryl, alkoxy, aryloxy, heteroaryloxy, alkyloxycarbonyl, aryloxycarbonyl, heteroaryloxycarbonyl, alkanoyl, aroyl, heteroaroyl, alkylcarbonyloxy, arylcarbonyloxy, heteroarylcarbonyloxy, alkylthio, arylthio, heteroarylthio, alkylthio, arylthio, heteroarylthio, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, alkylsulfinyl, arylsulfinyl, heteoarylsulfinyl, NR1R2, NR1COR2, NR1SO2R2, NR1CONR2R3, CONR1R2 (wherein R1, R2, R3 = H, alkyl, alkenyl, alkoxy, aryl, aryloxy, heteroaryloxy, or heteroaryl, or R1 and R2 or R2 and R3 are linked to each other to form a (un)substituted ring optionally containing at least one ring atom selected from O, N, and S and optionally containing a double bond); or when two of A, B, and C are linked to adjacent carbon atoms, they form a benzene ring or methylenedioxy; X, X1 = H, halo, NO2, cyano, OH, CO2H, alkyl, alkenyl or alkynyl, aryl, heteroaryl, alkoxy, aryloxy, heteroaryloxy, alkanoyl, aroyl, heteroaroyl, alkylcarbonyloxy, arylcarbonyloxy, heteroarylcarbonyloxy, alkylthio, arylthio, heteroarylthio, heteroaryloxycarbonyl, alkylthio, arylthio, heteroarylthio, alkylsulfonyl, arylsulfonyl, heteroarylsulfonyl, alkylsulfinyl, arylsulfinyl, heteoarylsulfinyl, NR4R5, NR4COR5, NR4SO2R5, NR4CONR5R6, O2CNR4R5, CONR4R5 (where R4 - R6 group listed in R1 - R3)] or their salts are prepared Also claimed are cell adhesion inhibitors, integrin VLA-4 (α4β1) and/or LPAM-1 (α4β7) antagonists, α4 integrin inhibitors, or therapeutics or preventives inflammatory diseases related to cell adhesion process containing I or the salts as the active ingredients. These compds. are superior in oral absorption and in vivo dynamic. Thus, acylation of 3-(4-aminophenyl)-2-[3-[(2,2-dimethylpropionyl)isobutylamino]-4-methoxyphenyl]propionic acid Et ester by 2,6-dichlorobenzoyl chloride in pyridine gave 71% 3-[4-(2,6-dichlorobenzoylamino)phenyl]-2-[3-[(2,2-

L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
dimethylpropionyl)isobutylamino]-4-methoxyphenyl]propionic acid Et ester which was sapond. with a mixt. of aq. NaOH, THF, and MeOH followed by acidification with aq. HCl to give 91% 2,3-diphenylpropionic acid deriv. (II; B = MeO, Z = CH) (III). III and II (B = Et, Z = N) inhibited adhesion of myeloid leukemic cells HL-60 expressing VLA-4 to Chinese hamster (CHO) cells expressing human VCAM-1 with IC50 of 2 and 0.1 nM, resp.
IT 400646-55-1P 400646-63-1P 400646-71-1P
400646-79-9P 400646-87-9P 400646-95-9P
400647-03-2P 400647-11-2P 400647-19-0P
400647-27-0P 400647-35-0P 400647-43-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 2,3-diphenylpropionic acid derivs. or their salts as cell adhesion inhibitors, integrin antagonists or inhibitors, and antiinflammatory agents)
RN 400646-55-1 CAPLUS
CN Benzenepropanoic acid, α-[3-[(2,2-dimethyl-1-oxopropyl)(2-methylpropyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

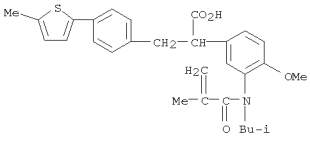


RN 400646-63-1 CAPLUS
CN Benzenepropanoic acid, α-[4-methoxy-3-[(2-methylpropyl)(1-oxo-2-butenyl)amino]phenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

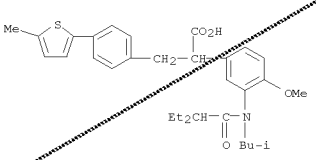


RN 400646-71-1 CAPLUS
CN Benzenepropanoic acid, α-[4-methoxy-3-[(2-methyl-1-oxo-2-propenyl)(2-methylpropyl)amino]phenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

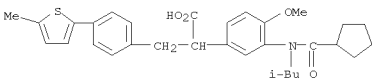
L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 400646-79-9 CAPLUS
CN Benzenepropanoic acid, α-[3-[(2-ethyl-1-oxobutyl)(2-methylpropyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

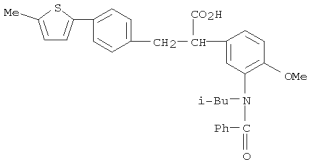


RN 400646-87-9 CAPLUS
CN Benzenepropanoic acid, α-[3-[(cyclopentylcarbonyl)(2-methylpropyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

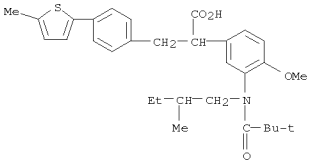


RN 400646-95-9 CAPLUS
CN Benzenepropanoic acid, α-[3-[benzoyl(2-methylpropyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

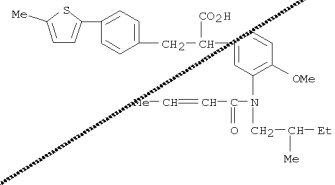
L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 400647-03-2 CAPLUS
CN Benzenepropanoic acid, α-[3-[(2,2-dimethyl-1-oxopropyl)(2-methylbutyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

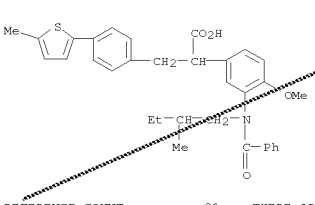


RN 400647-11-2 CAPLUS
CN Benzenepropanoic acid, α-[4-methoxy-3-[(2-methylbutyl)(1-oxo-2-butenyl)amino]phenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



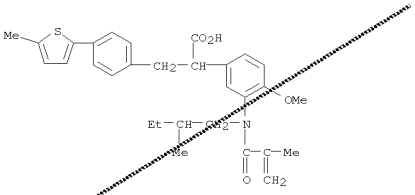
RN 400647-19-0 CAPLUS
CN Benzenepropanoic acid, α-[4-methoxy-3-[(2-methylbutyl)(2-methyl-1-oxo-2-propenyl)amino]phenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX

L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

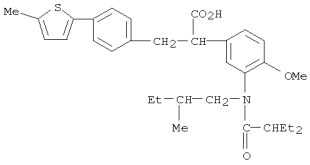


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

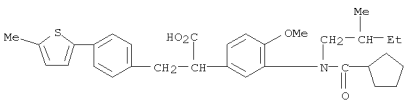
L19 ANSWER 118 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
NAME)



RN 400647-27-0 CAPLUS
CN Benzenepropanoic acid, α-[3-[(2-ethyl-1-oxobutyl)(2-methylbutyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



RN 400647-35-0 CAPLUS
CN Benzenepropanoic acid, α-[3-[(cyclopentylcarbonyl)(2-methylbutyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)



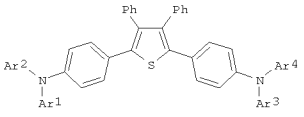
RN 400647-43-0 CAPLUS
CN Benzenepropanoic acid, α-[3-[benzoyl(2-methylbutyl)amino]-4-methoxyphenyl]-4-(5-methyl-2-thienyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 119 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:139114 CAPLUS
DOCUMENT NUMBER: 136:207491
TITLE: Organic electroluminescent component
INVENTOR(S): Nakatsuka, Masakatsu; Ishida, Tsutomu; Shimamura, Takehiko; Totani, Yoshiyuki
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

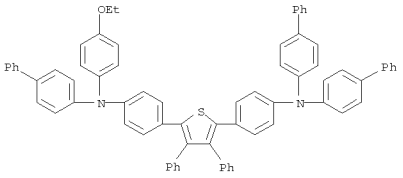
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2002056984 | A | 20020222 | JP 2000-242477 | 20000810 |
| PRIORITY APPLN. INFO.: | | | JP 2000-242477 | 20000810 |

OTHER SOURCE(S): MARPAT 136:207491
GI

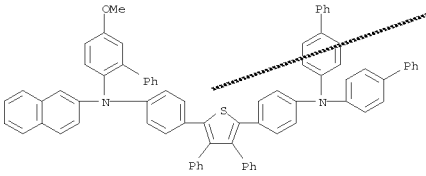


AB The invention refers to an organic electroluminescent component comprising at least layer containing one compound of type I [Ar1-3 = biphenyl; Ar4 = unsubstituted Ph or naphthyl] between two electrodes.
IT 401479-81-0 401479-87-6 401479-88-7
401480-02-2 401480-25-9 401480-29-3
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)
RN 401479-81-0 CAPLUS
CN [1,1'-Biphenyl]-4-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[[1,1'-biphenyl]-4-yl(4-ethoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 119 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



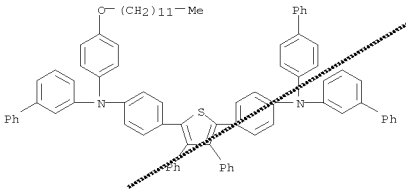
RN 401479-87-6 CAPLUS
CN 2-Naphthalenamine, N-[4-[5-[4-[bis([1,1'-biphenyl]-4-yl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-(5-methoxy[1,1'-biphenyl]-2-yl)- (9CI) (CA INDEX NAME)



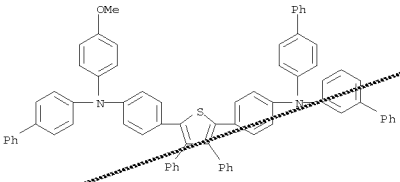
RN 401479-88-7 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-4-yl-N-[4-[5-[4-[[1,1'-biphenyl]-4-yl(4-methoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 119 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

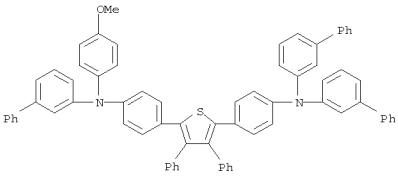
RN 401479-29-3 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[4-[5-[4-([1,1'-biphenyl]-3-yl[1,1'-biphenyl]-4-ylamino)phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-[4-(dodecyloxy)phenyl]- (9CI) (CA INDEX NAME)



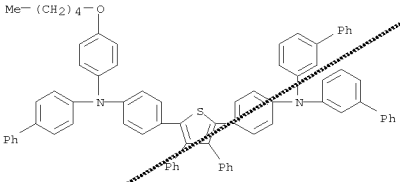
L19 ANSWER 119 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 401480-02-2 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-3-yl-N-[4-[5-[4-[[1,1'-biphenyl]-3-yl(4-methoxyphenyl)amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)



RN 401480-25-9 CAPLUS
CN [1,1'-Biphenyl]-3-amine, N-[1,1'-biphenyl]-3-yl-N-[4-[5-[4-[[1,1'-biphenyl]-4-yl[4-(pentyloxy)phenyl]amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 120 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

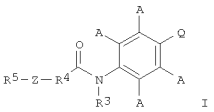
ACCESSION NUMBER: 2002:107327 CAPLUS
DOCUMENT NUMBER: 136:167394
TITLE: Preparation of carboxamide compounds and their use as antagonists of a human 11CBY receptor
INVENTOR(S): Johnson, Christopher Norbert; Jones, Martin; O'Toole, Catherine Anne; Stemp, Geoffrey; Thewlis, Kevin Michael; Witty, David
PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002010146 | A1 | 20020207 | WO 2001-EP8637 | 20010726 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2417638 | A1 | 20020207 | CA 2001-2417638 | 20010726 |
| EP 1305304 | A1 | 20030502 | EP 2001-956562 | 20010726 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001012856 | A | 20030701 | BR 2001-12856 | 20010726 |
| HU 200302966 | A2 | 20031229 | HU 2003-2966 | 20010726 |
| JP 2004505070 | T | 20040219 | JP 2002-515877 | 20010726 |
| IN 2002KN01581 | A | 20050311 | IN 2002-KN1581 | 20021226 |
| ZA 2003000262 | A | 20040413 | ZA 2003-262 | 20030109 |
| NO 2003000471 | A | 20030328 | NO 2003-471 | 20030130 |
| MX 2003PA00923 | A | 20030609 | MX 2003-PA923 | 20030130 |
| BG 107510 | A | 20030930 | BG 2003-107510 | 20030130 |
| US 2004063686 | A1 | 20040401 | US 2003-343424 | 20030930 |

PRIORITY APPLN. INFO.: GB 2000-18758 A 20000731
GB 2001-12544 A 20010523
WO 2001-EP8637 W 20010726

OTHER SOURCE(S): MARPAT 136:167394
GI

L19 ANSWER 120 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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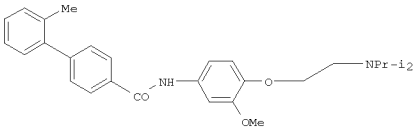


II

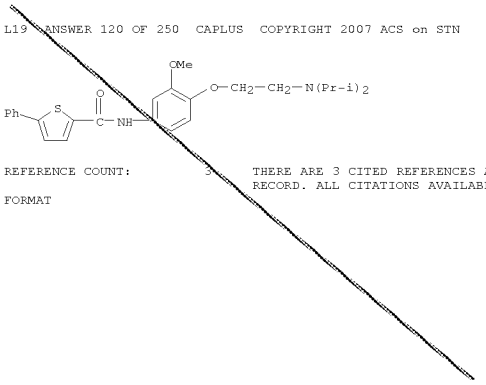
AB Title compds. [I; A = H, C1-6alkyl optionally substituted by hydroxyl, C1-6alkoxy, C1-6alkenyl, C1-6 acyl, halogeno, OH, CN, CF3; R3 = H, CH3, CH3CH2; R4 = aromatic carbocycle, heterocycle; Z = O, S, NH, CH2, single bond, at the 3 or 4 position of R4 relative to the carbonyl group; R5 = aromatic carbocycle, heterocycle; Q = XYNR1R2; X = O, S; Y = C2-4 alkylene, C5-6 cycloalkylene; R1, R2 independently = C1-6 alkyl, phenyl-C1-6 alkyl; R1R2 = 5-, 6-, 7-membered ring optionally containing one or more heteroatom selected from O, S, N; etc.], pharmaceutically acceptable salts, and solvate are prepared and as antagonists of a human 11CBY receptor. Title compds. and pharmaceutical composition are useful in the treatment and/or prophylaxis of one or more of the disorder, such as, major depression, manic depression, anxiety, etc. Thus, the title compound II was prepared from 2'-methyl-biphenyl-4-carboxylic acid and 4-(2-diisopropylamino-ethoxy)-3-methoxy-phenylamine in DMF in the presence of 1-(3-dimethylaminopropyl)-3-Et carbodiimide hydrochloride and 1-hydroxy-7-azabenzotriazole.

IT 395679-02-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of carboxamide compds. as antagonists of human 11CBY receptor)

RN 395679-02-4 CAPLUS

CN 2-Thiophenecarboxamide, N-[4-[2-[bis(1-methylethyl)amino]ethoxy]-3-methoxyphenyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 120 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:72091 CAPLUS
DOCUMENT NUMBER: 136:134566
TITLE: Synthesis and use of heteroaryl-substituted-aryloxyalkylaryl compounds as β3-adrenergic agonists
INVENTOR(S): Evers, Britta; Jesudason, Cynthia Darshini; Karanjawala, Rushad Eruch; Remick, David Michael; Ruehter, Gerd; Sall, Daniel Jon; Schotten, Theo; Siegel, Miles Goodman; Stenzel, Wolfgang; Stucky, Russell Dean; Werner, John Arnold
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2002006276 | A1 | 20020124 | WO 2001-US16519 | 20010709 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2415331 | A1 | 20020124 | CA 2001-2415331 | 20010709 |
| AU 200172917 | A | 20020130 | AU 2001-72917 | 20010709 |
| EP 1303509 | A1 | 20030423 | EP 2001-952125 | 20010709 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| BR 2001012409 | A | 20030722 | BR 2001-12409 | 20010709 |
| HU 2003301329 | A2 | 20030828 | HU 2003-1329 | 20010709 |
| JP 2004504320 | T | 20040212 | JP 2002-512179 | 20010709 |
| IN 2002KN01338 | A | 20040501 | IN 2002-KN1338 | 20021025 |
| ZA 2002008741 | A | 20040216 | ZA 2002-8741 | 20021029 |
| US 2003191156 | A1 | 20031009 | US 2002-311112 | 20021213 |
| US 6730792 | B2 | 20040504 | | |
| NO 2003000098 | A | 20030109 | NO 2003-98 | 20030109 |
| MX 2003PA00308 | A | 20030606 | MX 2003-PA308 | 20030110 |
| HR 2003000018 | A1 | 20030430 | HR 2003-18 | 20030113 |
| US 2004242633 | A1 | 20041202 | US 2004-838904 | 20040504 |

PRIORITY APPLN. INFO.: US 2000-217965P P 20000713
US 2000-241614P P 20001019
US 2001-292988P P 20010523
WO 2001-US16519 W 20010709
US 2002-311112 A1 20021213

OTHER SOURCE(S): MARPAT 136:134566
GI

L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [A1-3 = C, N provided that only one of A1-3 can be nitrogen; Het = (un)substituted, optionally benzofused 5 or 6 membered heterocyclic ring; R1,1a,1b = H, halo, OH, alkyl, alkoxy, haloalkyl, SO2-alkyl; R2 = H, alkyl; R3 = H alkyl; R4 = H, alkyl; or R3 and R4 combine with the carbon to which both are attached to form a C3-C6 cyclic ring; or R4 and X1 combine with the carbon to which both are attached to form a C3-C8 cyclic ring; or R4 combines with X1, the carbon to which both are attached, and the Ph group to which X1 is attached to form a benzofused cycloalkyl radical; X is OCH2, SCH2, bond; X1 = bond, divalent hydrocarbon moiety; X2 = O, S, NH, NHSO2, SO2NH, CH2, bond; X3 = (un)substituted Ph, 5 or 6 membered heterocyclic ring] were prepared For instance, 2-(1-methylpyrazol-3-yl)phenol was reacted with (2S)-glycidyl 3-nitrobenzenesulfonate (THF, t-BuOK, reflux, 16 h) to give epoxide II. This was reacted with the amine derived from 4-(2-amino-2-methylpropyl)phenol and 2-chloro-3-cyanopyridine (alc. solvent, 80°C, 2-72 h) to give III. The intrinsic activity (Emax) of representative compds. of the invention was assessed relative to isoproterenol (a nonselective β3-agonist); III had Emax = 55.0%. I are used in the treatment of diabetes, obesity, etc.

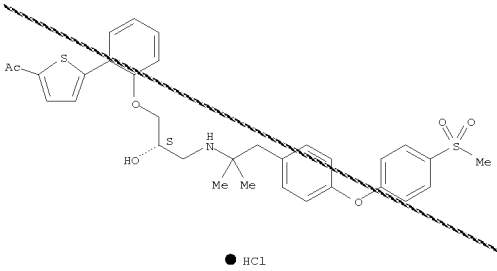
IT 391925-49-8P 391925-51-2P 391925-81-8P 391925-83-0P 391925-86-3P 391925-90-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; synthesis and use of heteroaryl-substituted-aryloxyalkylaryl compds. as β3-adrenergic agonists)

RN 391925-49-8 CAPLUS

CN Ethanone, 1-[5-[2-[(2S)-3-[[1,1-dimethyl-2-[4-[4-(methylsulfonyl)phenoxy]phenyl]ethyl]amino]-2-hydroxypropoxy]phenyl]-2-thienyl]-, hydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

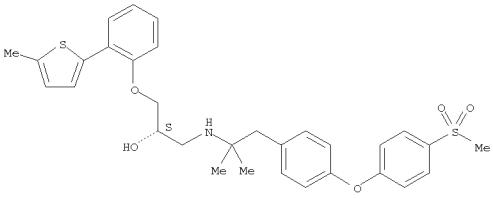
L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● HCl

RN 391925-51-2 CAPLUS
CN 2-Propanol, 1-[[1,1-dimethyl-2-[4-[4-(methylsulfonyl)phenoxy]phenyl]ethyl]amino]-3-[2-(5-methyl-2-thienyl)phenoxy]-, hydrochloride, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

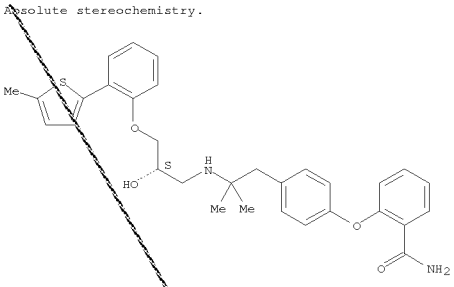


● HCl

RN 391925-81-8 CAPLUS
CN Benzamide, 4-[4-[2-[[(2S)-2-hydroxy-3-[2-(5-methyl-2-thienyl)phenoxy]propyl]amino]-2-methylpropyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.



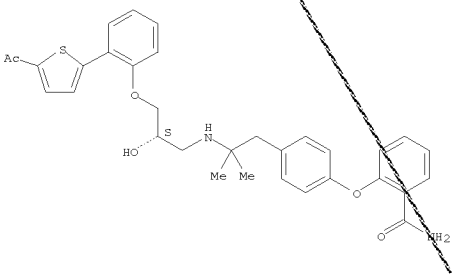
● HCl

RN 391925-90-9 CAPLUS
CN Benzamide, 2-[4-[2-[[(2S)-3-[2-(5-acetyl-2-thienyl)phenoxy]-2-hydroxypropyl]amino]-2-methylpropyl]phenoxy]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

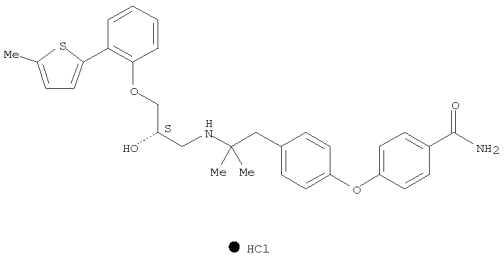
CRN 391925-89-6
CMF C32 H34 N2 O5 S

Absolute stereochemistry.



L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

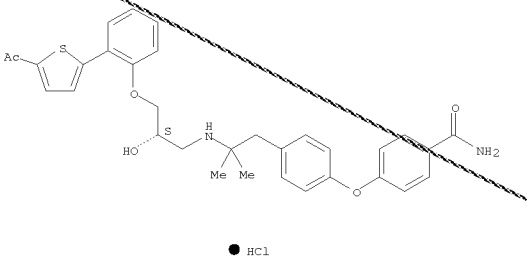
Absolute stereochemistry.



● HCl

RN 391925-83-0 CAPLUS
CN Benzamide, 4-[4-[2-[[(2S)-3-[2-(5-acetyl-2-thienyl)phenoxy]-2-hydroxypropyl]amino]-2-methylpropyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

RN 391925-86-3 CAPLUS
CN Benzamide, 2-[4-[2-[[(2S)-2-hydroxy-3-[2-(5-methyl-2-thienyl)phenoxy]propyl]amino]-2-methylpropyl]phenoxy]-, monohydrochloride (9CI) (CA INDEX NAME)

L19 ANSWER 121 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

CRN 76-05-1
CMF C2 H F3 O2

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

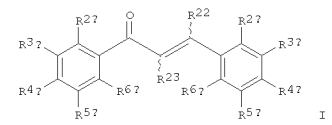
L19 ANSWER 122 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:935594 CAPLUS
DOCUMENT NUMBER: 136:69730
TITLE: Preparation of 1,3-bis-(substituted-phenyl)-2-propen-1-ones as VCAM-1 inhibitors for treatment of inflammatory disorders
INVENTOR(S): Meng, Charles Q.; Ni, Liming; Sikorski, James A.; Hoong, Lee K.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 220 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001098291 | A2 | 20011227 | WO 2001-US19720 | 20010620 |
| WO 2001098291 | A3 | 20020516 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2413878 | A1 | 20011227 | CA 2001-2413878 | 20010620 |
| BR 2001011889 | A | 20030624 | BR 2001-11889 | 20010620 |
| EP 1330448 | A2 | 20030730 | EP 2001-946583 | 20010620 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| US 6608101 | B1 | 20030819 | US 2001-886348 | 20010620 |
| JP 2004501147 | T | 20040115 | JP 2002-504247 | 20010620 |
| NZ 523443 | A | 20041126 | NZ 2001-523443 | 20010620 |
| MX 2002PA12660 | A | 20040514 | MX 2002-PA12660 | 20021218 |
| IN 2003DN00008 | A | 20060609 | IN 2003-DN8 | 20030101 |
| ZA 2003000134 | A | 20051006 | ZA 2003-134 | 20030106 |
| US 2003236298 | A1 | 20031225 | US 2003-443470 | 20030521 |
| US 7078431 | B2 | 20060718 | | |
| US 2006258735 | A1 | 20061116 | US 2006-485940 | 20060713 |

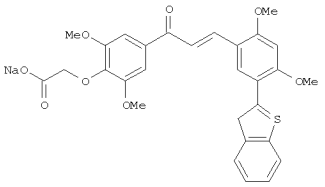
PRIORITY APPLN. INFO.: US 2000-212769P P 20000620
US 2000-255934P P 20001215
US 2001-886348 A1 20010620
WO 2001-US19720 W 20010620
US 2003-443470 A1 20030521

OTHER SOURCE(S): MARPAT 136:69730

L19 ANSWER 122 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
GI



I

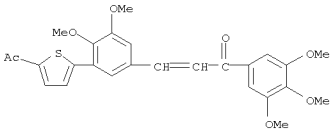


II

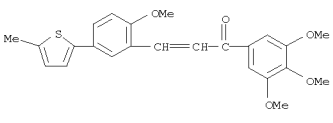
AB Title compds. I [wherein R2a, R3a, R4a, R5a, R6a, R2b, R3b, R4b, R5b, and R6b = independently H, (cyclo)alkyl, (hetero)aryl, carbocyclyl, (halo)alkylthio, (un)substituted alkoxy or amino, (halo)acyl, amido, (halo)alkylsulfonyl, aminocarbonyl, alkenyl, alkynyl, halo, OH, SH, CN, NO2, SO3H, sulf(on)amido, PO3H2, alditol, carbohydrate, amino acid, etc.; R22 and R23 = independently H or alkyl; or R22 and R6a or R23 and R6a can join together to form a bridged carbocycle, (hetero)aryl, or heterocycle; R2a and R3a, R3a and R4a, R4a and R5a, R5a and R6a, R2b and R3b, R3b and R4b, R4b and R5b, or R5b and R6b and independently join to form a bridged (un)substituted carbocycle, cycloalkenyl, cycloalk(en)ylcarbonyl, (hetero)aryl, heterocycle, or alkylenedioxy; and the E or Z isomers thereof] were prepared to inhibit the expression of VCAM-1. For example, 3',5'-dimethoxy-4'-hydroxyacetophenone was treated with Et glycolate, PPh3, and di-Et azodicarboxylate in THF to give 4'-ethoxycarbonylmethoxy-3',5'-dimethoxyacetophenone (90%). Coupling the acetophenone and 5-(benzo[b]thien-2-yl)-2,4-dimethoxybenzaldehyde (preparation given) in the presence of NaOH in absolute EtOH afforded the 1,3-diphenyl-2-propen-1-one II (39%), which stimulated cultured human aortic smooth muscle cell activity with IC50 of 0.45 μM. I are useful for the treatment of inflammatory disorders that are mediated by VCAM-1, including arthritis, asthma, dermatitis, cystic fibrosis, post transplantation late and chronic solid organ rejection, multiple sclerosis, systemic lupus erythematosis, inflammatory bowel diseases, autoimmune diabetes, diabetic retinopathy, rhinitis, ischemia-reperfusion injury, post-angioplasty restenosis, chronic obstructive pulmonary disease (COPD), glomerulonephritis, Graves disease, gastrointestinal allergies, conjunctivitis, atherosclerosis, coronary artery disease, angina and small artery disease.

IT 383173-76-0P 383174-14-9P 383174-15-0P 383174-17-2P 383174-18-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of bis(substituted phenyl)propenones as VCAM-1 inhibitors for treatment of inflammatory disorders)

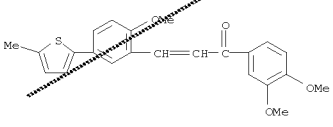
RN 383173-76-0 CAPLUS
CN 2-Propen-1-one, 3-[3-(5-acetyl-2-thienyl)-4,5-dimethoxyphenyl]-1-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



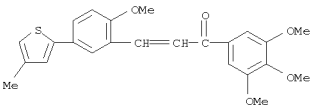
RN 383174-14-9 CAPLUS
CN 2-Propen-1-one, 3-[2-methoxy-5-(5-methyl-2-thienyl)phenyl]-1-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



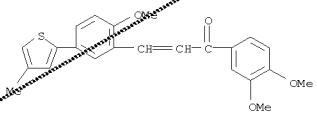
RN 383174-15-0 CAPLUS
CN 2-Propen-1-one, 1-(3,4-dimethoxyphenyl)-3-[2-methoxy-5-(5-methyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



RN 383174-17-2 CAPLUS
CN 2-Propen-1-one, 3-[2-methoxy-5-(4-methyl-2-thienyl)phenyl]-1-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)



RN 383174-18-3 CAPLUS
CN 2-Propen-1-one, 1-(3,4-dimethoxyphenyl)-3-[2-methoxy-5-(4-methyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)

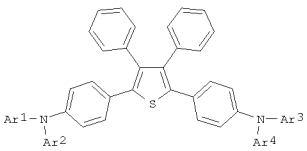


L19 ANSWER 123 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:903581 CAPLUS
DOCUMENT NUMBER: 136:29077
TITLE: Bisaminophenyldiphenylthiophene derivatives and organic electroluminescent devices using them
INVENTOR(S): Nakatsuka, Masakatsu; Shimamura, Takehiko; Ishida, Tsutomu
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2001345181 | A | 20011214 | JP 2000-161965 | 20000531 |

PRIORITY APPLN. INFO.: JP 2000-161965 20000531

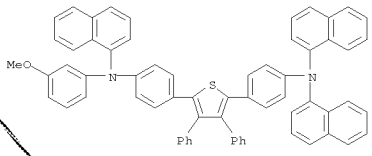
OTHER SOURCE(S): MARPAT 136:29077
GI



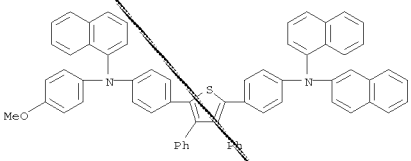
I

AB The invention relates to an electroluminescent device comprising a pair of electrodes sandwiching ≥ 1 layer(s) containing ≥1 bis(naphthyl/phenyl)aminophenyldiphenylthiophene I [Ar1-3 = (un)substituted naphthyl; Ar4 = (un)substituted Ph or naphthyl]. The long Luminous life is superior in durability.
IT 378798-83-5P 378798-98-2P 378799-02-1P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organic electroluminescent devices containing)
RN 378798-83-5 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-(di-1-naphthalenylamino)phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

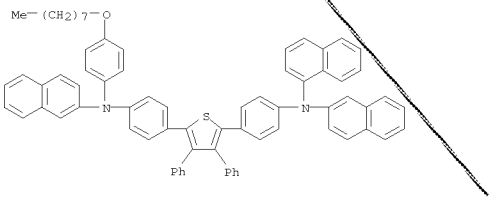
L19 ANSWER 123 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 378798-98-2 CAPLUS
CN 1-Naphthalenamine, N-[4-[5-[4-[(4-methoxyphenyl)-1-naphthalenylamino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)



RN 378799-02-1 CAPLUS
CN 1-Naphthalenamine, N-2-naphthalenyl-N-[4-[5-[4-[2-naphthalenyl[4-(octyloxy)phenyl]amino]phenyl]-3,4-diphenyl-2-thienyl]phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 124 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:798196 CAPLUS
DOCUMENT NUMBER: 135:344382
TITLE: Preparation of arylbiphenylpropanoates and analogs for treatment of prostaglandin E-mediated disorders
INVENTOR(S): Gallant, Michel; Lachance, Nicholas; Labelle, Marc; Zamboni, Robert; Juteau, Helene; Gareau, Yves; Lacombe, Patrick
PATENT ASSIGNEE(S): Merck Frosst Canada & Co., Can.
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001081312 | A2 | 20011101 | WO 2001-CA563 | 20010423 |
| WO 2001081312 | A3 | 20020808 | | |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
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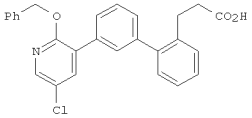
| EP 1278734 | A2 | 20030129 | EP 2001-927526 | 20010423 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| JP 2003531194 | T | 20031021 | JP 2001-578407 | 20010423 |
| US 2002082266 | A1 | 20020627 | US 2001-840942 | 20010424 |
| US 6627656 | B2 | 20030930 | | |

PRIORITY APPLN. INFO.: US 2000-199299P P 20000424
WO 2001-CA563 W 20010423

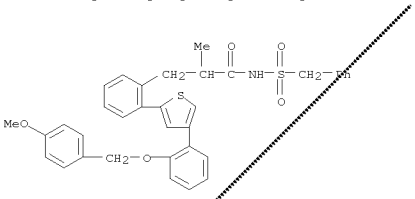
OTHER SOURCE(S): MARPAT 135:344382
GI



I

AB RZCHR1CR2R3R4 [R = (hetero)aryl; R1,R4 = H; R1R4 = bond; R2 = CO2H,

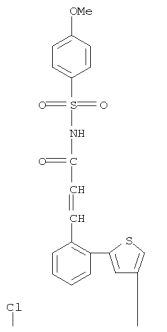
L19 ANSWER 124 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CONHSO2R5, etc.; R3 = e.g., H or Me; R5 = cycloalkyl, (hetero)aryl, etc.; Z = (un)substituted 1,2-phenylene] were prepd. treatment of prostaglandin E-mediated disorders (no data). Thus, 2-(OHC)C6H4B(OH)2 was arylated by 3-BrC6H4Br and the product condensed with (EtO)2P(O)CH2CO2Et to give, in 2 addnl. steps, 3-BrC6H4C6H4(CH2CH2CO2H)-2 the Me ester of which was treated with diboron pinacol ester and the product arylated by 3-bromo-5-chloro-2-phenylmethoxypyridine (prepn. given) to give title compd. I.
IT 371146-89-3P 371146-93-9P 371146-97-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylbiphenylpropanoates and analogs for treatment of prostaglandin E-mediated disorders)
RN 371146-89-3 CAPLUS
CN Benzenepropanamide, 2-[4-[2-[(4-methoxyphenyl)methoxy]phenyl]-2-thienyl]-α-methyl-N-[(phenylmethyl)sulfonyl]- (9CI) (CA INDEX NAME)



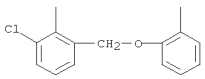
RN 371146-93-9 CAPLUS
CN 2-Propenamide, 3-[2-[4-[2-[(2,3-dichlorophenyl)methoxy]phenyl]-2-thienyl]phenyl]-N-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 124 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

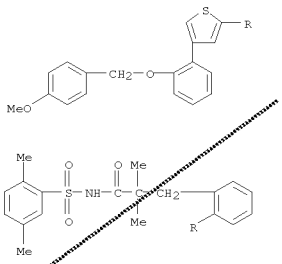


PAGE 2-A



RN 371146-97-3 CAPLUS
CN Benzenepropanamide, N-[(2,5-dimethylphenyl)sulfonyl]-2-[4-[2-[(4-methoxyphenyl)methoxy]phenyl]-2-thienyl]-β,α-dimethyl- (9CI) (CA INDEX NAME)

L19 ANSWER 124 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:617988 CAPLUS
DOCUMENT NUMBER: 135:195581
TITLE: Preparation of thiazepinyl hydroxamic acid derivatives as matrix metalloproteinase inhibitors
INVENTOR(S): Neya, Masahiro; Yamazaki, Hitoshi; Ohne, Kazuhiko; Sawada, Yuki; Mizutani, Tsuyoshi; Imamura, Yoshimasa; Mukai, Noriko
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 446 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001060808 | A1 | 20010823 | WO 2001-JP1206 | 20010220 |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2400862 | A1 | 20010823 | CA 2001-2400862 | 20010220 |
| AU 200134097 | A | 20010827 | AU 2001-34097 | 20010220 |
| EP 1259499 | A1 | 20021127 | EP 2001-906142 | 20010220 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| HU 200204501 | A2 | 20030428 | HU 2002-4501 | 20010220 |
| JP 2003523337 | T | 20030805 | JP 2001-560193 | 20010220 |
| BR 2001008791 | A | 20040427 | BR 2001-8791 | 20010220 |
| NO 2002003921 | A | 20021011 | NO 2002-3921 | 20020819 |
| US 2003134849 | A1 | 20030717 | US 2002-203627 | 20020819 |
| US 6967197 | B2 | 20051122 | | |
| MX 2002PA08175 | A | 20030523 | MX 2002-PA8175 | 20020821 |
| IN 2002CN01484 | A | 20050128 | IN 2002-CN1484 | 20020918 |

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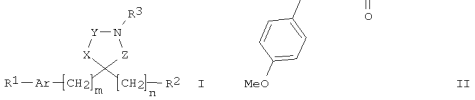
|---|---|---|---|
| PRIORITY APPLN. INFO.: | AU 2000-5751 | A | 20000221 |
| | AU 2000-8603 | A | 20000706 |
| | WO 2001-JP1206 | W | 20010220 |

OTHER SOURCE(S): MARPAT 135:195581
GI

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

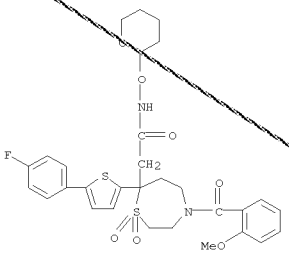


AB The title compds. [I; R1 = halo, alkoxy, (un)substituted aryl, etc.; R2 = amidated carboxy; R3 = H, acyl; Ar = aryl, heterocyclyl; X = S, SO, SO2; Y, Z = alkylene; m, n = 0-2], useful as inhibitors of matrix metalloproteinases (MMP) or the production of tumor necrosis factor α (TNF α), were prepared E.g., a multi-step synthesis of II which showed IC50 of 2.85 nM against human MMP-9, was given.

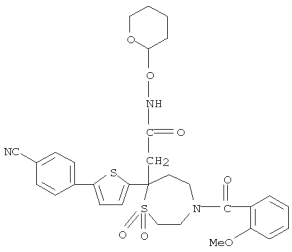
IT 355842-94-3P 355842-97-6P 355843-16-2P
355843-49-1P 355844-41-6P 355844-47-2P
355844-48-3P 355844-65-4P 355845-06-6P
355845-27-1P 355845-42-0P 355845-43-1P
355845-44-2P 355845-52-2P 355845-63-5P
355845-64-6P 355845-69-1P 355845-70-4P
355845-72-6P 355845-73-7P 355845-75-9P
355846-00-3P 355846-01-4P 355846-02-5P
355846-10-5P 355846-18-3P 355846-52-5P
355846-53-6P 355846-75-2P 355846-76-3P
355846-78-5P 355846-79-6P 355846-81-0P
355846-91-2P 355846-95-6P 355847-76-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thiazepinyl hydroxamic acid derivs. as matrix metalloproteinase inhibitors)

RN 355842-94-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-fluorophenyl)-2-thienyl]hexahydro-4-(2-methoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

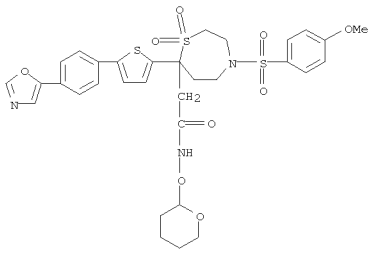


RN 355842-97-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-cyanophenyl)-2-thienyl]hexahydro-4-(2-methoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

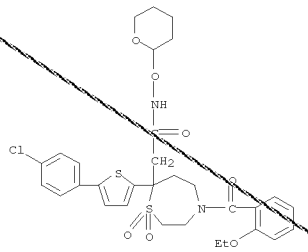


RN 355843-16-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-[(4-methoxyphenyl)sulfonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

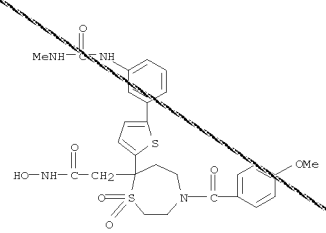


RN 355843-49-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]-4-(2-ethoxybenzoyl)hexahydro-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

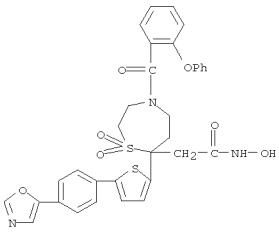


RN 355844-41-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(4-methoxybenzoyl)-7-[5-[3-[[(methylamino)carbonyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

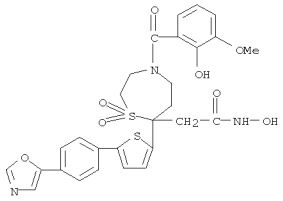


RN 355844-47-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2-phenoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

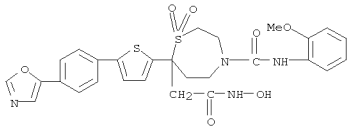


RN 355844-48-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(2-hydroxy-3-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

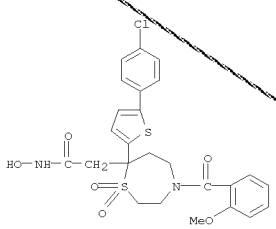
L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 355844-65-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-[[(2-methoxyphenyl)amino]carbonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

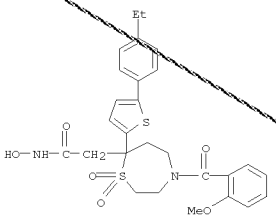


RN 355845-06-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

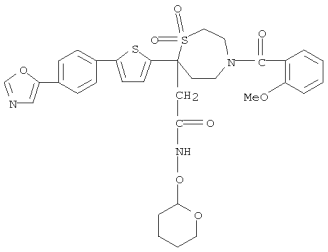


RN 355845-27-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-ethylphenyl)-2-thienyl]hexahydro-N-

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

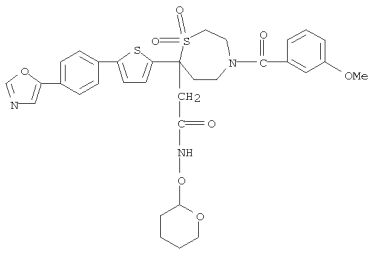


RN 355845-42-0 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(2-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

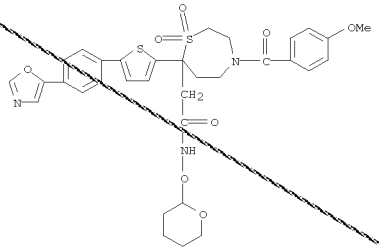


RN 355845-43-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(3-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

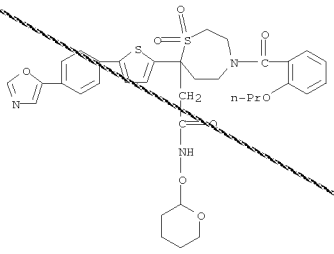


RN 355845-44-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-4-(4-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

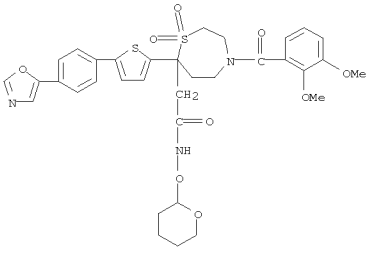


RN 355845-52-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2-propoxybenzoyl)-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

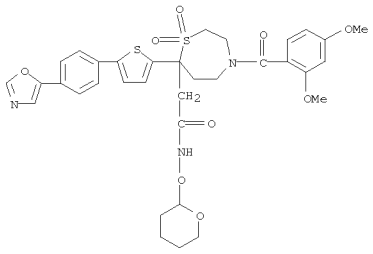


RN 355845-63-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,3-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

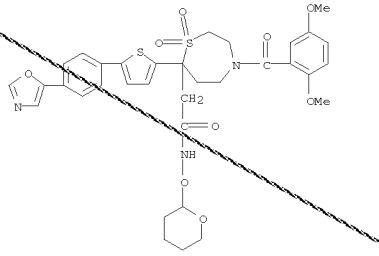


RN 355845-64-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,4-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

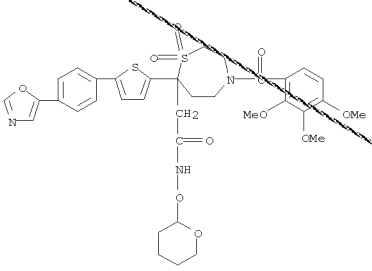


RN 355845-69-1 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,5-dimethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

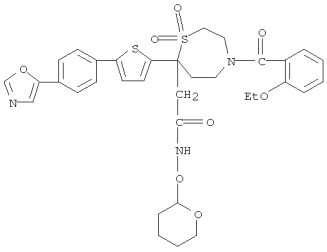


RN 355845-70-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-4-(2,3,4-trimethoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

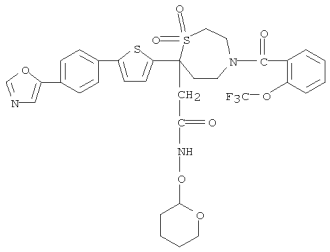


RN 355845-72-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2-ethoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

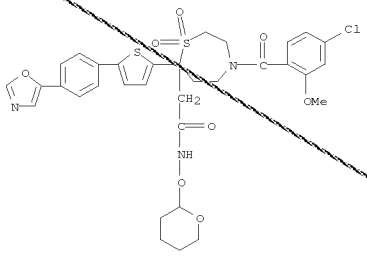


RN 355845-73-7 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-4-[2-(trifluoromethoxy)benzoyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

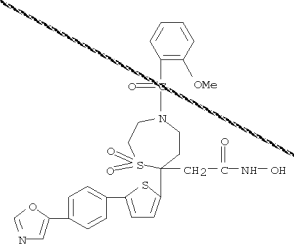


RN 355845-75-9 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(4-chloro-2-methoxybenzoyl)hexahydro-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide (9CI) (CA INDEX NAME)

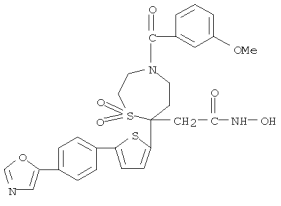


RN 355846-00-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

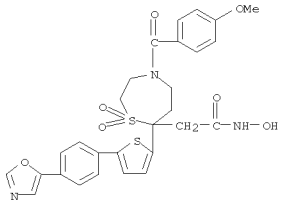


RN 355846-01-4 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(3-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

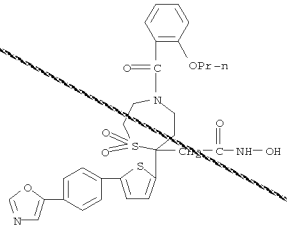


RN 355846-02-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-(4-methoxybenzoyl)-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

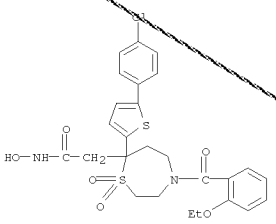


RN 355846-10-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2-propoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

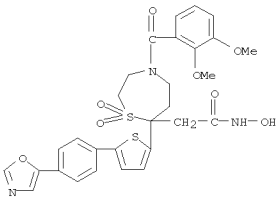


RN 355846-18-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-chlorophenyl)-2-thienyl]-4-(2-ethoxybenzoyl)hexahydro-N-hydroxy-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

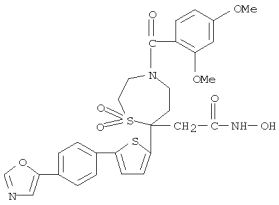


RN 355846-52-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,3-dimethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

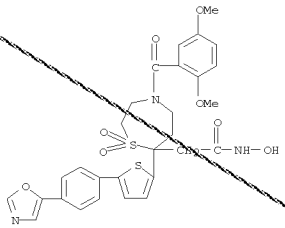


RN 355846-53-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,4-dimethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

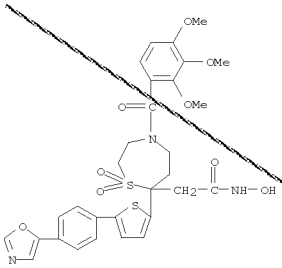


RN 355846-75-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2,5-dimethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

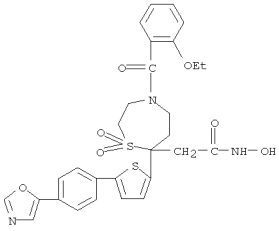


RN 355846-76-3 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-(2,3,4-trimethoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

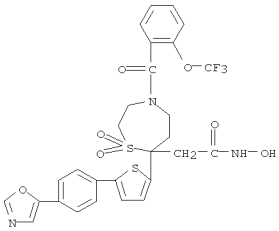


RN 355846-78-5 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(2-ethoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

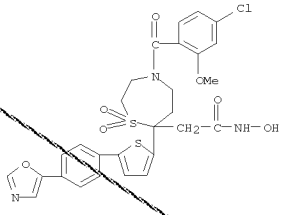


RN 355846-79-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-4-[2-(trifluoromethoxy)benzoyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

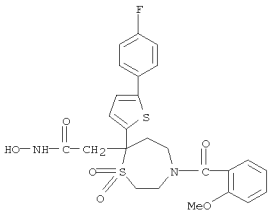


RN 355846-81-0 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 4-(4-chloro-2-methoxybenzoyl)hexahydro-N-hydroxy-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

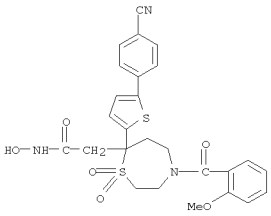


RN 355846-91-2 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-fluorophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

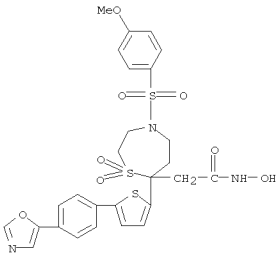


RN 355846-95-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, 7-[5-(4-cyanophenyl)-2-thienyl]hexahydro-N-hydroxy-4-(2-methoxybenzoyl)-, 1,1-dioxide (9CI) (CA INDEX NAME)



RN 355847-76-6 CAPLUS
CN 1,4-Thiazepine-7-acetamide, hexahydro-N-hydroxy-4-[(4-methoxyphenyl)sulfonyl]-7-[5-[4-(5-oxazolyl)phenyl]-2-thienyl]-, 1,1-dioxide (9CI) (CA INDEX NAME)

L19 ANSWER 125 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



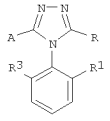
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 126 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

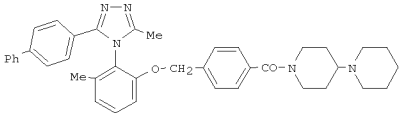
ACCESSION NUMBER: 2001:597968 CAPLUS
DOCUMENT NUMBER: 135:180769
TITLE: Preparation of novel triazole derivatives as arginine vasopressin receptor antagonists
INVENTOR(S): Suzuki, Takeshi; Tobe, Takahiko; Murakami, Takeshi; Tahara, Atsuo
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2001058880 | A1 | 20010816 | WO 2000-JP668 | 20000208 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| PRIORITY APPLN. INFO.: | | | WO 2000-JP668 | 20000208 |

OTHER SOURCE(S): MARPAT 135:180769
GI



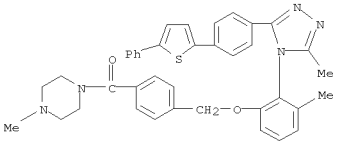
I



II

L19 ANSWER 126 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

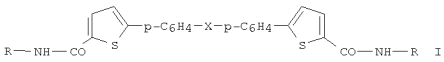
AB Title compds. [I; R = H, CH3, CH2CH3, CH2CH2CH3; R1 = H, OCH3, OCH2CH3, CH3, C6H5, I, OH, CH(CH3)2, heterocyclylalkoxy, heterocyclylcarbonylphenylmethoxy; R3 = H, CH3; A = 4-C6H5C6H4, 4-(2-CH3C6H4NHCSNH)C6H4, 4-(2-CH3C6H4NHCONH)C6H4] and pharmaceutically acceptable salts thereof are prepared as arginine vasopressin V1a receptor antagonists. Title compds. I are tested for AVP (arginine vasopressin) inhibitory effect with pKi = 6.0-9.1. Thus, the title compound II was prepared
IT 354799-47-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of triazole derivs. as arginine vasopressin receptor antagonists)
RN 354799-47-6 CAPLUS
CN Piperazine, 1-methyl-4-[4-[[3-methyl-2-[3-methyl-5-[4-(5-phenyl-2-thienyl)phenyl]-4H-1,2,4-triazol-4-yl]phenoxy]methyl]benzoyl]- (9CI) (CA INDEX NAME)



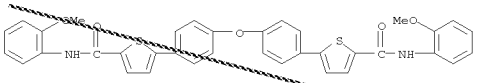
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 127 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:574518 CAPLUS
DOCUMENT NUMBER: 135:357824
TITLE: Molecular recognition: studies on the synthesis of some bis thiophene carboxamide derivatives as ditopic receptors for long chain dicarboxylic acids
AUTHOR(S): Ray, J. K.; Gupta, S.; Pan, D.; Kar, G. K.
CORPORATE SOURCE: Department of Chemistry, Indian Institute of Technology, Kharagpur, 721302, India
SOURCE: Tetrahedron (2001), 57(33), 7213-7219
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:357824
GI

$C_{30}H_{32}N_2O_3S_2$
Stereo: ns

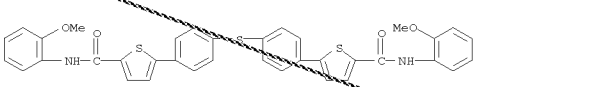


AB New mol. receptors I (R = Bu, 2-Py, 2-MeO-Ph, and X = O, S) with di-Ph ether/di-Ph sulfide as spacer having functional groups complementary to long chain dicarboxylic acids were developed. Binding studies with different dicarboxylic acids showed high association consts. with receptors I
(R = Bu and X = O, S).
IT 372111-21-2P 372111-22-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of bisthiophenecarboxamide ditopic receptors and lack of mol.
recognition of dicarboxylic acids)
RN 372111-21-2 CAPLUS
CN 2-Thiophenecarboxamide, 5,5'-(oxydi-4,1-phenylene)bis[N-(2-methoxyphenyl)-
(9CI) (CA INDEX NAME)



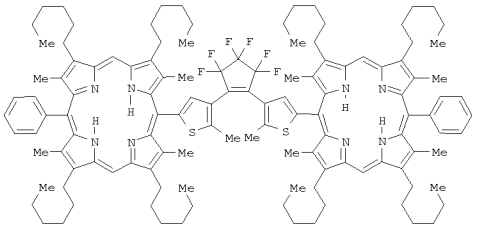
RN 372111-22-3 CAPLUS
CN 2-Thiophenecarboxamide, 5,5'-(thiodi-4,1-phenylene)bis[N-(2-methoxyphenyl)-

L19 ANSWER 127 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(9CI) (CA INDEX NAME)



REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

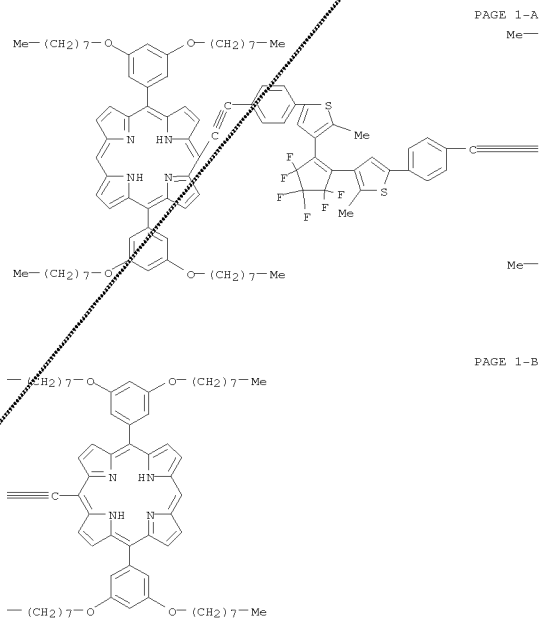
L19 ANSWER 128 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:315858 CAPLUS
DOCUMENT NUMBER: 135:92463
TITLE: Synthesis and Photoisomerization of Dithienylethene-Bridged Diporphyrins
AUTHOR(S): Osuka, Atsuhiro; Fujikane, Daisuke; Shinmori, Hideyuki; Kobatake, Seiya; Irie, Masahiro
CORPORATE SOURCE: Department of Chemistry Graduate School of Science, Kyoto University and CREST Japan Science Technology Corporation (JST), Kyoto, 606-8502, Japan
SOURCE: Journal of Organic Chemistry (2001), 66(11), 3913-3923
CODEN: JOCEAH; ISSN: 0022-2263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:92463
GI



I

AB Dithienylethene-bridged diporphyrins, e.g. I, were prepared as photochem. switching mols. The close attachment of the porphyrin chromophore to the dithienylethene led to the loss of their photochromic reactivity, and therefore some examples did not undergo any photochem. isomerization, probably due to efficient quenching of the excited dithienylethene by the attached porphyrin moiety via intramol. energy transfer. The pertinent insertion of a spacer between the dithienylethene and porphyrin moieties allowed two examples to undergo open-to-closed and closed-to-open photoisomerizations in quantum yields of 4.3 + 10-2 and 1.8 + 10-3, and 2.6 + 10-3 and 7.5 + 10-4, resp., by irradiation with 313 and 625 nm light, which are considerably smaller than quantum yields of 0.52 and 3.8 + 10-3 for a reference dithienylethene. The fluorescence of one example was regulated in a reversible manner by the photoisomerization of the dithienylethene moiety. In addition, the absorption properties of the porphyrin in another example changed in response to the photochromic reaction of the dithienylethene bridge.
IT 348638-95-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

L19 ANSWER 128 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(synthesis and photoisomerization of dithienylethene-bridged diporphyrins)
RN 348638-95-9 CAPLUS
CN 21H,23H-Porphine, 5,5'-[(3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[(5-methyl-4,2-thiophenediyl)-4,1-phenylene-2,1-ethynediyl]]bis[10,20-bis[3,5-bis(octyloxy)phenyl]- (9CI) (CA INDEX NAME)



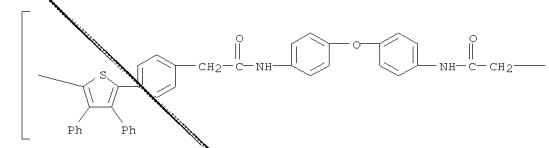
REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 128 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

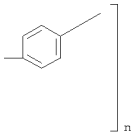
L19 ANSWER 129 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:872024 CAPLUS
DOCUMENT NUMBER: 134:147952
TITLE: Synthesis and characterization of aromatic-aliphatic polyamides
AUTHOR(S): Ubale, V. P.; Sagar, A. D.; Maldar, N. N.; Birajdar, M. V.
CORPORATE SOURCE: Chemistry Department, Shivaji University Centre for Post-Graduate Studies, Solapur, 413 003, India
SOURCE: Journal of Applied Polymer Science (2000), Volume Date
2001, 79(3), 566-571
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new monomer, 2,5-bis(4-carboxy methylene phenyl)-3,4-diphenyl thiophene (V) has been synthesized and characterized by phys. and spectroscopic methods. A series of eight aromatic-aliphatic polyamides was prepared from the (V) and different aromatic diamines using Yamazaki's direct phosphorylation reaction. The polyamides were characterized by IR spectroscopy, viscosity measurements, and thermal anal. An excellent yield of these polyamides was obtained, with inherent viscosities in the range of 0.28 to 0.67 dL/g, and the polyamide were readily soluble in aprotic polar solvents such as N-methyl-2-pyrrolidone, N-N-di-Me acetamide, DMSO, and so forth. Polyamides could be cast into transparent and flexible films. They had glass transition temps. of 225-273°C. When evaluated by thermogravimetry, thermal anal. of the polyamides showed no weight loss below 311°C, and the char yield in air at 900°C was 55%-67%. The structure-property correlation among these polyamides is also discussed.
IT 324078-29-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and characterization of aromatic-aliphatic polyamides)
RN 324078-29-7 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(2-oxo-1,2-ethanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1-oxo-1,2-ethanediyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 129 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

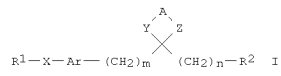
L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:475658 CAPLUS
DOCUMENT NUMBER: 133:104964
TITLE: Preparation of tetrahydro-2H-thiopyran-1,1-dioxides as inhibitors of matrix metalloproteinases or tumor necrosis factor α
INVENTOR(S): Taniguchi, Kiyoshi; Neya, Masahiro; Terasawa, Takeshi; Yamazaki, Hitoshi; Sato, Kentaro; Hosoi, Kumi; Tomishima, Yasuyo; Yoshida, Noriko; Imamura, Yoshimasa; Takasugi, Hisashi; Setoi, Hiroyuki
PATENT ASSIGNEE(S): Fujisawa Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 336 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000040576 | A2 | 20000713 | WO 2000-JP18 | 20000106 |
| WO 2000040576 | A3 | 20010322 | | |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| CA 2357874 | A1 | 20000713 | CA 2000-2357874 | 20000106 |
| AU 200018905 | A | 20000724 | AU 2000-18905 | 20000106 |
| AU 759900 | B2 | 20030501 | | |
| EP 1140895 | A2 | 20011010 | EP 2000-900122 | 20000106 |
| EP 1140895 | B1 | 20040324 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| TR 200101936 | T2 | 20011221 | TR 2001-1936 | 20000106 |
| BR 2000008589 | A | 20020129 | BR 2000-8589 | 20000106 |
| HU 200104859 | A2 | 20021028 | HU 2001-4859 | 20000106 |
| RU 2221792 | C2 | 20040120 | RU 2001-121981 | 20000106 |
| AT 262517 | T | 20040415 | AT 2000-900122 | 20000106 |
| ES 2213563 | T3 | 20040901 | ES 2000-900122 | 20000106 |
| MX 2001PA06896 | A | 20020604 | MX 2001-PA6896 | 20010705 |

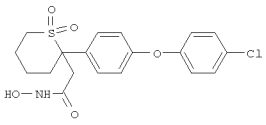
PRIORITY APPLN. INFO.: AU 1999-8068 A 19990107
AU 1999-1702 A 19990719
WO 2000-JP18 W 20000106

OTHER SOURCE(S): MARPAT 133:104964
GI

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



I



II

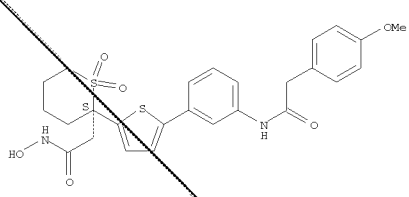
AB The title compds. (I) [wherein R1 = alkyl, halogen, (un)substituted heterocyclic or aryl; R2 = (protected or amidated) carboxy; Ar = (un)substituted aryl heterocyclic; A = alkylene; X = O or a single bond; Y = S, S(O), or SO2; Z = methylene, S, S(O), or SO2; m and n = independently 0-6, and 1 ≤ m+n ≤ 6] and their salts were prepared by addition reactions of alkyl or aryl halides with tetrahydro-2H-thiopyrans and subsequent oxidation to form the 1,1-dioxides. For example, II was synthesized in a multi-step sequence involving (1) etherification of 3,4,5,6-tetrahydro-2-(4-hydroxyphenyl)-2H-thiopyran (preparation given) with 4-bromochlorobenzene, (2) addition of tert-Bu bromoacetate, (3) formation of the 1,1-dioxide using oxone, (4) deesterification with CF3CO2H, and (5) amidation of the acid with hydroxylammonium chloride. In an in vitro assay, II suppressed matrix metalloproteinase 13 (MMP-13) activity with IC50 of 2.2 nM. I are useful for the treatment and/or prevention of diseases such as stroke, arthritis, cancer, tissue ulceration, decubitus ulcer, restenosis, periodontal disease, epidermolysis bullosa, scleritis, psoriasis, and other disease characterized by MMP activity, as well as IADS, sepsis, septic shock, and other diseases caused by the production of TNF α (no data).

IT 282112-91-8P 282112-92-9P 282112-94-1P 282112-95-2P 282113-48-8P 282113-56-8P 282113-58-0P 282113-59-1P 282113-97-7P 282114-04-9P 282114-09-4P 282114-20-9P 282114-77-6P 282114-87-8P 282115-02-0P 282115-49-5P 282115-68-8P 282115-88-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(prepn. of tetrahydro-2H-thiopyran 1,1-dioxides as MMP or TNF α inhibitors by addn. reactions of alkyl or aryl halides with tetrahydro-2H-thiopyrans and subsequent oxidn. to form 1,1-dioxides)

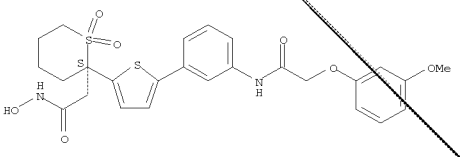
RN 282112-91-8 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[(4-methoxyphenyl)acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282112-92-9 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[(3-methoxyphenoxy)acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

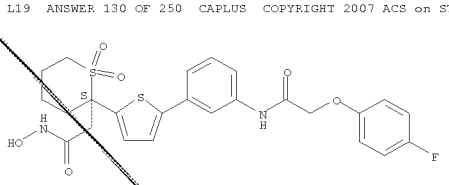
Absolute stereochemistry.



RN 282112-94-1 CAPLUS
CN 2H-Thiopyran-2-acetamide, 2-[5-[3-[[(4-fluorophenoxy)acetyl]amino]phenyl]-2-thienyl]tetrahydro-N-hydroxy-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

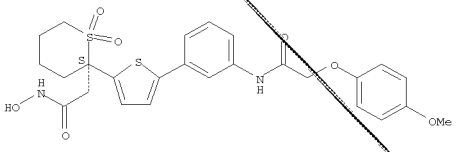
Absolute stereochemistry.

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



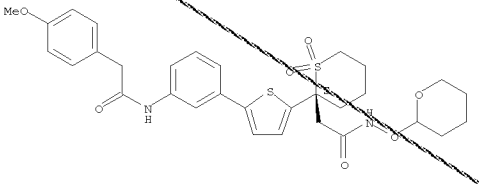
RN 282112-95-2 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[(4-methoxyphenoxy)acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282113-48-8 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[(4-methoxyphenyl)acetyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

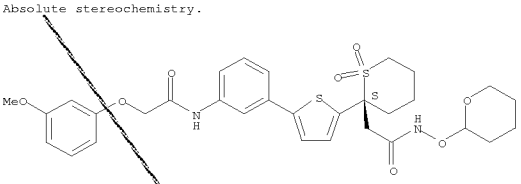
Absolute stereochemistry.



RN 282113-56-8 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[(3-methoxyphenoxy)acetyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

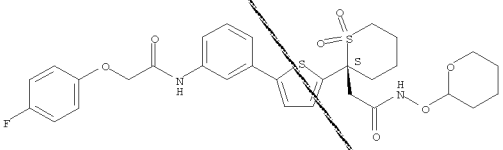
L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.



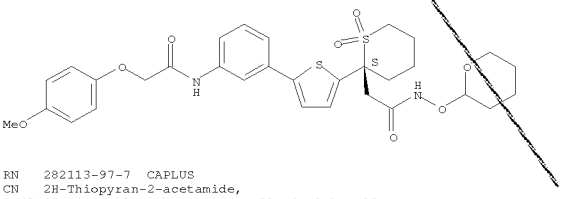
RN 282113-58-0 CAPLUS
CN 2H-Thiopyran-2-acetamide, 2-[5-[3-[[(4-fluorophenoxy)acetyl]amino]phenyl]-2-thienyl]tetrahydro-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 282113-59-1 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[(4-methoxyphenoxy)acetyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

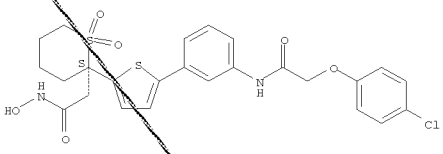
Absolute stereochemistry.



RN 282113-97-7 CAPLUS
CN 2H-Thiopyran-2-acetamide, 2-[5-[3-[[(4-chlorophenoxy)acetyl]amino]phenyl]-2-thienyl]tetrahydro-N-hydroxy-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

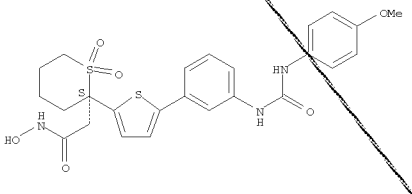
L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Absolute stereochemistry.



RN 282114-04-9 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[[(4-methoxyphenyl)amino]carbonyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)-
(9CI) (CA INDEX NAME)

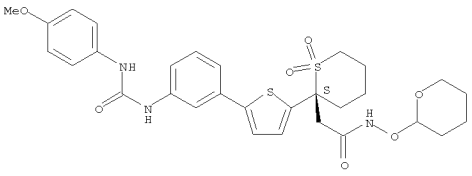
Absolute stereochemistry.



RN 282114-09-4 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[(4-methylphenoxy)acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

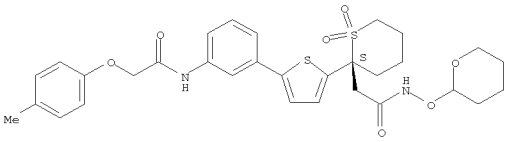
Absolute stereochemistry.

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 282114-87-8 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[(4-methylphenoxy)acetyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

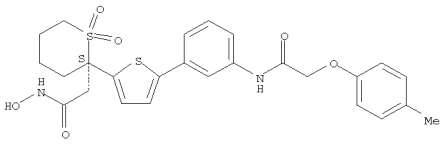
Absolute stereochemistry.



RN 282115-02-0 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[4-[(1E)-3-[(4-methoxyphenyl)amino]-3-oxo-1-propenyl]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

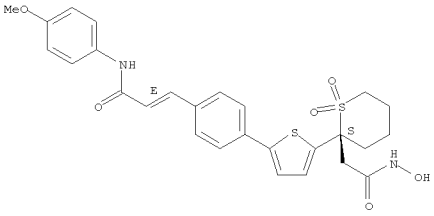
Absolute stereochemistry.
Double bond geometry as shown.

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 282114-20-9 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[4-[(1E)-3-[(4-methoxyphenyl)amino]-3-oxo-1-propenyl]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

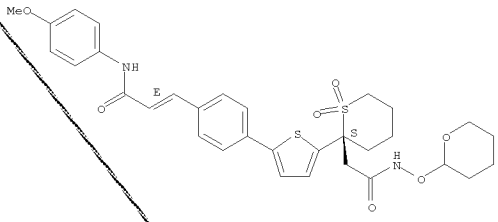
Absolute stereochemistry.
Double bond geometry as shown.



RN 282114-77-6 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[[(4-methoxyphenyl)amino]carbonyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

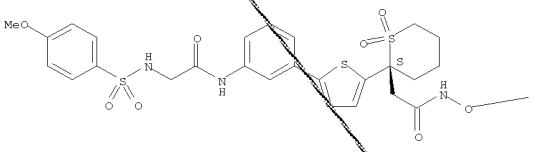
L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 282115-49-5 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-2-[5-[3-[[[[(4-methoxyphenyl)sulfonyl]amino]acetyl]amino]phenyl]-2-thienyl]-N-[(tetrahydro-2H-pyran-2-yl)oxy]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

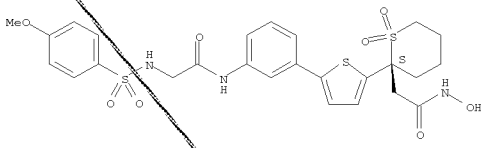


PAGE 1-B

RN 282115-68-8 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[[[(4-methoxyphenyl)sulfonyl]amino]acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

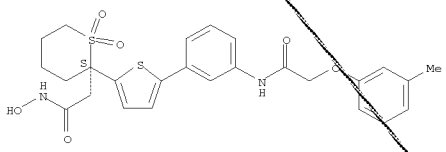
Absolute stereochemistry.

L19 ANSWER 130 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 282115-88-2 CAPLUS
CN 2H-Thiopyran-2-acetamide, tetrahydro-N-hydroxy-2-[5-[3-[[(3-methylphenoxy)acetyl]amino]phenyl]-2-thienyl]-, 1,1-dioxide, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L19 ANSWER 131 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:457921 CAPLUS
DOCUMENT NUMBER: 133:193729
TITLE: Redox States of Well-Defined π-Conjugated Oligothiophenes Functionalized with Poly(benzyl ether) Dendrons
AUTHOR(S): Apperloo, Joke J.; Janssen, Rene A. J.; Malenfant, Patrick R. L.; Groenendaal, Lambertus; Frechet, Jean M. J.
CORPORATE SOURCE: Laboratory for Macromolecular and Organic Chemistry, Eindhoven University of Technology, Eindhoven, 5600 MB, Neth.
SOURCE: Journal of the American Chemical Society (2000), 122(29), 7042-7051
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

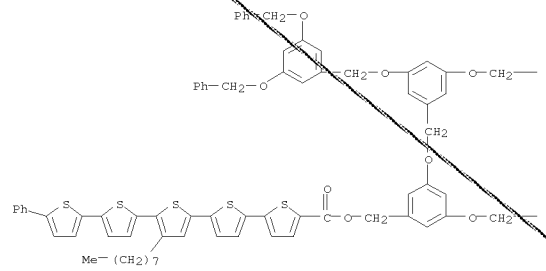
AB The redox states of a series of well-defined hybrid dendrimers based on oligothiophene cores and poly(benzyl ether) dendrons have been studied using cyclic voltammetry and variable-temperature UV/visible/near-IR spectroscopy. The oxidation potentials and the electronic transitions of the neutral, singly oxidized, and doubly oxidized states of these novel hybrid materials have been determined as a function of oligothiophene conjugation length varying between 4 and 17 repeat units. The attachment of poly(benzyl ether) dendritic wedges at the termini of these lengthy oligothiophenes considerably enhances their solubility, thus enabling the first detailed investigation of the electronic structure of oligothiophenes having 11 and 17 repeat units with minimal β-substitution. In the case of the undecamer and heptadecamer, we find that the dicationic state consists of two individual polarons, rather than a single bipolaron. The effect of the dendritic poly(benzyl ether) solubilizers on the properties of the redox states varies with the oligothiophene length and dendron size. More specifically, we observe a kinetic limit to the electrochem. oxidation of the oligothiophene core when the dendron is large compared to the electrophore. Finally, we have observed the first example of self-complexation of cation radicals via π-dimerization leading to the formation of dendritic supramol. assemblies.

IT 288860-98-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(redox states of π-conjugated oligothiophenes functionalized with poly(benzyl ether) dendrons)

RN 288860-98-0 CAPLUS
CN [2,2':5',2'':5'',2''':5''',2''''-Quinquethiophene]-5-carboxylic acid, 4''-octyl-5''''-phenyl-, [3,5-bis[[3,5-bis[[3,5-bis(phenylmethoxy)phenyl]methoxy]phenyl]methoxy]phenyl]methyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 131 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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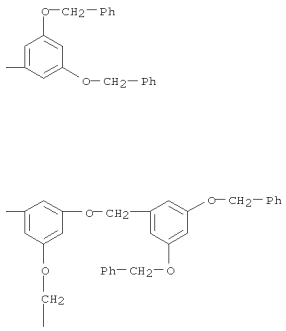
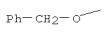
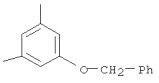


L19 ANSWER 131 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



PAGE 2-B



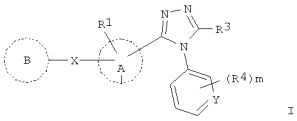
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 132 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:136274 CAPLUS
DOCUMENT NUMBER: 132:166239
TITLE: Preparation of triazoles as arginine vasopressin V1 receptor antagonists, and pharmaceuticals containing them
INVENTOR(S): Suzuki, Takeshi; Tobe, Takahiko; Murakami, Takeshi; Tahara, Atsuo
PATENT ASSIGNEE(S): Yamanouchi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 2000063363 | A | 20000229 | JP 1998-228403 | 19980812 |

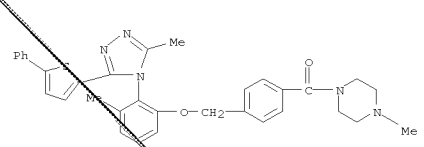
PRIORITY APPLN. INFO.: JP 1998-228403 19980812

OTHER SOURCE(S): MARPAT 132:166239
GI



I

AB Triazoles I (ring A = benzene or thiophene ring; ring B = aryl, heterocyclyl; R1 = H, halo, NO2, NH2, lower alkyl; R2 = alkyl, halo, OH, Ph, alkoxy, alkynyl, amino, etc.; R3 = H, lower alkyl; R4 = lower alkyl, alkoxy, alkylsulfonyl, halo, amino, cyano, trihalomethyl, nitro; X = bond, O, NHCO, etc.; m = 1-3) or their salts, useful for treatment of diabetic nephropathy, are prepared 2-(4'-Biphenyl)-1,3,4-oxadiazole was treated with o-anisidine at 150° for 12 h to give 12% 4-(2-methoxyphenyl)-3-(4'-biphenyl)-1,2,4-triazole.
IT 258878-09-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of triazoles as arginine vasopressin V1 receptor antagonists)
RN 258878-09-0 CAPLUS
CN Piperazine, 1-methyl-4-[4-[[3-methyl-2-[3-methyl-5-(5-phenyl-2-thienyl)-4H-1,2,4-triazol-4-yl]phenoxy]methyl]benzoyl]- (9CI) (CA INDEX NAME)

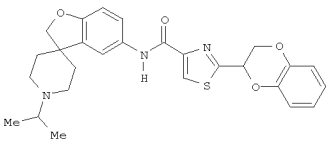


L19 ANSWER 133 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:98236 CAPLUS
DOCUMENT NUMBER: 132:151811
TITLE: Preparation of heterocyclecarboxamides and analogs as CCR5 receptor modulators
INVENTOR(S): Neeb, Michael J.; Bondinell, William E.; Ku, Thomas W.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2000006085 | A2 | 20000210 | WO 1999-US17118 | 19990728 |
| WO 2000006085 | A3 | 20000504 | | |
| W: CA, JP, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2338697 | A1 | 20000210 | CA 1999-2338697 | 19990728 |
| EP 1102535 | A2 | 20010530 | EP 1999-937586 | 19990728 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| JP 2002521408 | T | 20020716 | JP 2000-561942 | 19990728 |
| US 6399656 | B1 | 20020604 | US 2001-744629 | 20010409 |

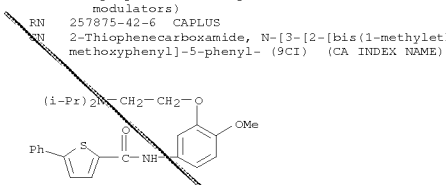
PRIORITY APPLN. INFO.: US 1998-94414P P 19980728
US 1998-94424P P 19980728
WO 1999-US17118 W 19990728

OTHER SOURCE(S): MARPAT 132:151811
GI



I

AB Title compds. were prepared Thus, 5-amino-1'-(1-methylethyl)spiro[benzofuran-3(2H),4'-piperidine] (preparation given) was amidated by 2-(2,3-dihydro-1,4-benzodioxin-2-yl)thiazole-4-carboxylic acid to give title compound I. Data for biol. activity of title compds. were given.
IT 257875-42-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of heterocyclecarboxamides and analogs as CCR5 receptor modulators)
RN 257875-42-6 CAPLUS
CN 2-Thiophenecarboxamide, N-[3-[2-[bis(1-methylethyl)amino]ethoxy]-4-methoxyphenyl]-5-phenyl- (9CI) (CA INDEX NAME)

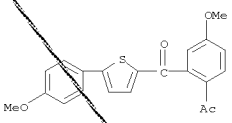


L19 ANSWER 134 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:808686 CAPLUS
DOCUMENT NUMBER: 132:36959
TITLE: Long-wavelength dyes for infrared tracing and their use
INVENTOR(S): Wu, Yexin; Klaubert, Dieter H.; Kang, Hee Chol; Zhang, Yu-zhong
PATENT ASSIGNEE(S): Molecular Probes, Inc., USA
SOURCE: U.S., 20 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

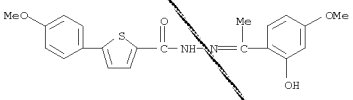
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 6005113 | A | 19991221 | US 1997-856422 | 19970514 |
| PRIORITY APPLN. INFO.: | | | US 1996-17716P P | 19960515 |

OTHER SOURCE(S): MARPAT 132:36959
AB The invention relates to fluorescent dyes that are substituted or unsubstituted derivs. of 1-(isoindolyl)methylene-isoindole that are bound through both isoindole nitrogens to a boron difluoride moiety, forming a fluorescent dibenzopyrromethene boron difluoride compds. which are further substituted by bathochromic substituents that are aryl or heteroaryl moieties further substituted by an addnl. aryl or heteroaryl that is itself optionally further substituted by an addnl. aryl or heteroaryl. These aryl and heteroaryl groups are separated by a covalent bond, or by an ethenyl, butadienyl or hexatrienyl linkage. The dyes of the invention are particularly useful as labels for carriers, particularly polymeric microparticles. The resulting microparticles have a long-wavelength fluorescence emission, and possess utility for tracing flow in biol. systems, particularly in tracing blood flow. In an example, fluorescent difluoro-(5-methoxy-1-((5-methoxy-3-(2-(5-(4-methoxyphenyl))thienyl)-2H-isoindol-1-yl)methylene)-3-(2-(5-(4-methoxyphenyl))thienyl)-1H-isoindolato-N1,N2)boron was prepared and incorporated into polystyrene microspheres.
IT 252666-61-8P 252666-69-6P
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)
(intermediate; production of fluorescent dyes for IR tracing)
RN 252666-61-8 CAPLUS
CN Ethanone, 1-[4-methoxy-2-[[5-(4-methoxyphenyl)-2-thienyl]carbonyl]phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 134 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 252666-69-6 CAPLUS
CN 2-Thiophenecarboxylic acid, 5-(4-methoxyphenyl)-, [1-(2-hydroxy-4-methoxyphenyl)ethylidene]hydrazide (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 135 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:736280 CAPLUS
DOCUMENT NUMBER: 131:351348
TITLE: Preparation of heterocyclic carboxamides as 5-HT1 agonists or antagonists
INVENTOR(S): Howard, Harry Ralph
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

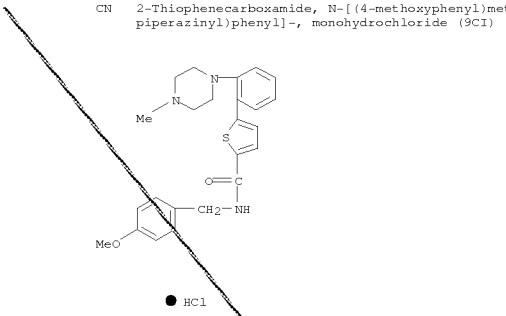
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 957099 | A2 | 19991117 | EP 1999-302288 | 19990325 |
| EP 957099 | A3 | 19991124 | | |
| EP 957099 | B1 | 20021120 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| AT 228119 | T | 20021215 | AT 1999-302288 | 19990325 |
| ES 2188095 | T3 | 20030616 | ES 1999-302288 | 19990325 |
| JP 11322711 | A | 19991124 | JP 1999-103917 | 19990412 |
| JP 3224372 | B2 | 20011029 | | |
| CA 2268870 | A1 | 19991015 | CA 1999-2268870 | 19990413 |
| CA 2268870 | C | 20050329 | | |
| BR 9901052 | A | 20000425 | BR 1999-1052 | 19990414 |
| US 6277852 | B1 | 20010821 | US 1999-291352 | 19990414 |
| US 2001041705 | A1 | 20011115 | US 2001-862932 | 20010522 |
| US 6602874 | B2 | 20030805 | | |
| US 2002002168 | A1 | 20020103 | US 2001-862691 | 20010522 |
| US 6537995 | B2 | 20030325 | | |
| US 2003232841 | A1 | 20031218 | US 2003-601209 | 20030620 |
| PRIORITY APPLN. INFO.: | | | US 1998-81790P P | 19980415 |
| | | | US 1999-291352 A3 | 19990414 |
| | | | US 2001-862932 A3 | 20010522 |

OTHER SOURCE(S): MARPAT 131:351348
GI

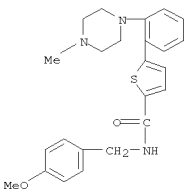
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; Z = O, S(O)m (wherein m = 0-2), NQ (Q = H, alkyl, Ph); X = H, halo, OH, etc.; Y = II-IV (M = O, S; X2 = H, F, Cl, etc.; R1 = V, VI, etc.; R6 = H, alkyl, etc.; R8 = H, alkyl; R10 = H, alkyl); R2 = H, alkyl, (un)substituted Ph, naphthyl; R3 = (CH2)tB (t = 0-3; B = H, (un)substituted Ph, naphthyl, etc.)], useful in treating or preventing migraine, depression and other disorders for which a 5-HT1, agonist or antagonist, is indicated, were prepared Thus, reaction of 5-bromofuran-2-carboxylic acid 4-chlorobenzylamide with 2-(4-methylpiperazin-1-yl)phenylboronic acid (prepns. were given) in the presence of Na2CO3 and Pd(PPh3)4 in 1,2-dimethoxyethane and water afforded

L19 ANSWER 135 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
the title compd. VII.HCl. Compds. I which were tested exhibited IC50's of < 0.60 μM for 5-HT1D and IC50's of < 1.0 μM for 5-HT1A affinity.
IT 250383-67-6P 250383-78-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic carboxamides as 5-HT1 agonists or antagonists)
RN 250383-67-6 CAPLUS
CN 2-Thiophenecarboxamide, N-[(4-methoxyphenyl)methyl]-5-[2-(4-methyl-1-piperazinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

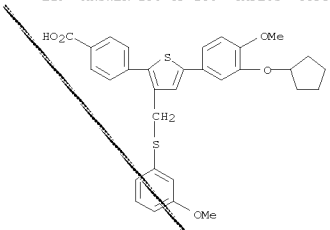


RN 250383-78-9 CAPLUS
CN 2-Thiophenecarboxamide, N-[(4-methoxyphenyl)methyl]-5-[2-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

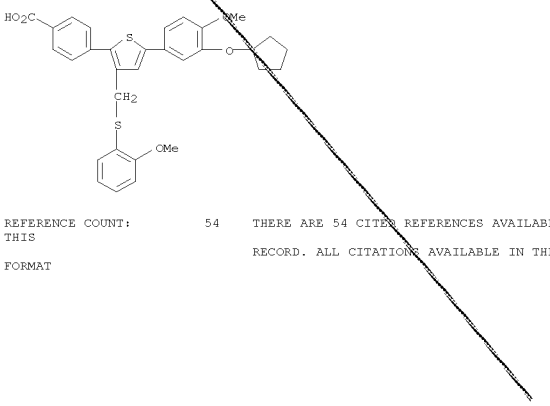


L19 ANSWER 136 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:625540 CAPLUS
DOCUMENT NUMBER: 132:12244
TITLE: Solid phase parallel synthesis of highly substituted thiophene derivatives and identification of novel phosphodiesterase-4 (PDE-4) inhibitors
AUTHOR(S): Han, Yongxin; Giroux, Andre; Lepine, Carole; Laliberte, France; Huang, Zheng; Perrier, Helene; Bayly, Christopher I.; Young, Robert N.
CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Frosst Centre for Therapeutic Research, Merck Frosst Canada Inc., Pointe-Claire-Dorval, QC, H9R 4P8, Can.
SOURCE: Tetrahedron (1999), 55(39), 11669-11685
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 132:12244
AB A versatile protocol for solid phase synthesis of highly substituted thiophene derivs. and their activity against the PDE-4 enzyme are discussed. This protocol employs 3-(hydroxymethyl)-2-thiopheneboronic acid as the scaffold and sequential palladium catalyzed cross-coupling reactions as the C-C bond forming step. This methodol. allows convenient modification of the thiophene core from three directions, giving rise to structurally diverse derivs. with overall high chemical purity and yield. A novel series of potent PDE-4 inhibitors was identified from these compds. Thus, polymer-bound 4-[3-(bromomethyl)-5-[3-(cyclopentyloxy)-4-methoxyphenyl]-2-thienyl]benzoic acid was prepared, treated with amines and the resulting product was cleaved from the support resin. Also prepared were 3-[5-(3,4-dimethoxyphenyl)-3-[[(4,6-dimethyl-2-pyrimidinyl)thio]methyl]-2-thienyl]-α,α-dimethylbenzenemethanol and analogs thereof.
IT 222840-29-1P 222840-43-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(solid-phase parallel synthesis of thiophene derivs. and their identification as phosphodiesterase-4 inhibitors)
RN 222840-29-1 CAPLUS
CN Benzoic acid, 4-[5-[3-(cyclopentyloxy)-4-methoxyphenyl]-3-[[(3-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 136 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 222840-43-9 CAPLUS
CN Benzoic acid, 4-[5-[3-(cyclopentyloxy)-4-methoxyphenyl]-3-[[(2-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

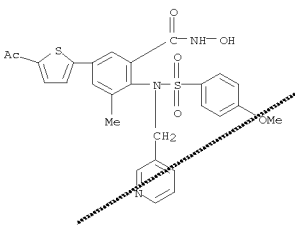


REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 137 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:495123 CAPLUS
DOCUMENT NUMBER: 131:129760
TITLE: Preparation of sulfonamidobenzenehydroxamates and analogs as matrix metalloproteinase and TACE inhibitors
INVENTOR(S): Levin, Jeremy Ian; Du, Mila T.; Venkatesan, Aranapakam Mudumbai; Nelson, Frances Christy; Zask, Arie; Gu, Yansong
PATENT ASSIGNEE(S): American Cyanamid Co., USA
SOURCE: U.S., 68 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

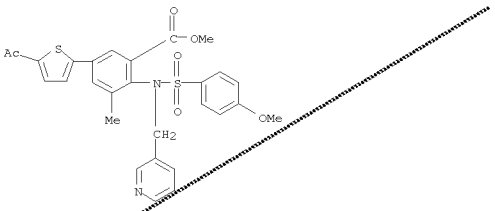
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 5929097 | A | 19990727 | US 1997-944593 | 19971006 |
| PRIORITY APPLN. INFO.: | | | US 1996-28504P P | 19961016 |

OTHER SOURCE(S): MARPAT 131:129760
AB RSO2N(CH2R7)ZCONHOH [I; R = (un)substituted (hetero)aryl; R7 = H, alkyl, Ph, etc.; Z = (un)substituted phenylene or -naphthylene] were prepared Thus, 2-(H2N)C6H4CO2Me was amidated by 4-(MeO)C6H4SO2Cl and the N-benzylated product converted in 2 steps to I [R = C6H4(OMe)-4, R7 = Ph, Z = 1,2-phenylene]. Data for biol. activity of I were given.
IT 206549-37-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamidobenzenehydroxamates and analogs as matrix metalloproteinase and TACE inhibitors)
RN 206549-37-3 CAPLUS
CN Benzamide, 5-(5-acetyl-2-thienyl)-N-hydroxy-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl- (9CI) (CA INDEX NAME)

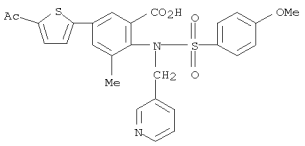


IT 206549-35-1P 206549-36-2P

L19 ANSWER 137 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of sulfonamidobenzenehydroxamates and analogs as matrix metalloproteinase and TACE inhibitors)
RN 206549-35-1 CAPLUS
CN Benzoic acid, 5-(5-acetyl-2-thienyl)-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 206549-36-2 CAPLUS
CN Benzoic acid, 5-(5-acetyl-2-thienyl)-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl- (9CI) (CA INDEX NAME)

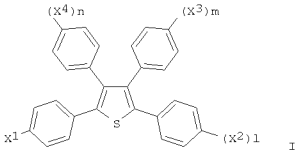


REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:394826 CAPLUS
DOCUMENT NUMBER: 131:80577
TITLE: Organic electric-field light-emitting device containing thiophene derivative
INVENTOR(S): Nakatsuka, Masakatsu; Kitamoto, Noriko
PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 26 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 11167990 | A | 19990622 | JP 1997-332149 | 19971202 |
| JP 3659781 | B2 | 20050615 | | |
| PRIORITY APPLN. INFO.: | | | JP 1997-332149 | 19971202 |

OTHER SOURCE(S): MARPAT 131:80577
GI

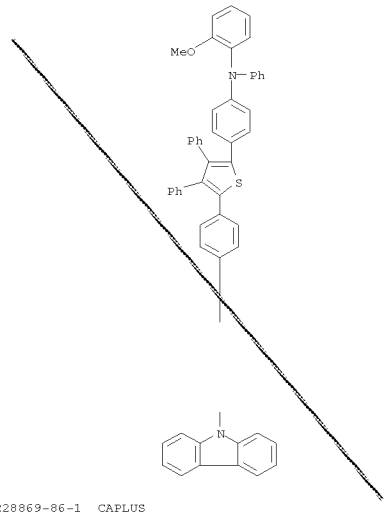


I

AB The device has a pair of electrodes sandwiching a layer containing a thiophene derivative I (X1 = N-carbazoyl, N-phenoxazyl, N-phenothiazyl; X2-4 = N-carbazoyl, N-phenoxazyl, N-phenothiazyl, NAr1Ar2; Ar1, 2 = aryl; l, m, n = 0, 1). The device shows long life and excellent durability.
IT 228869-85-0 228869-86-1 228869-92-9 228869-96-3 228870-00-6 228870-04-0 228870-10-8 228870-12-0 228870-14-2
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(organic elec.-field light-emitting device containing thiophene derivative)
RN 228869-85-0 CAPLUS
CN Benzenamine, N-[4-[5-[4-(9H-carbazol-9-yl)phenyl]-3,4-diphenyl-2-thienyl]phenyl]-2-methoxy-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



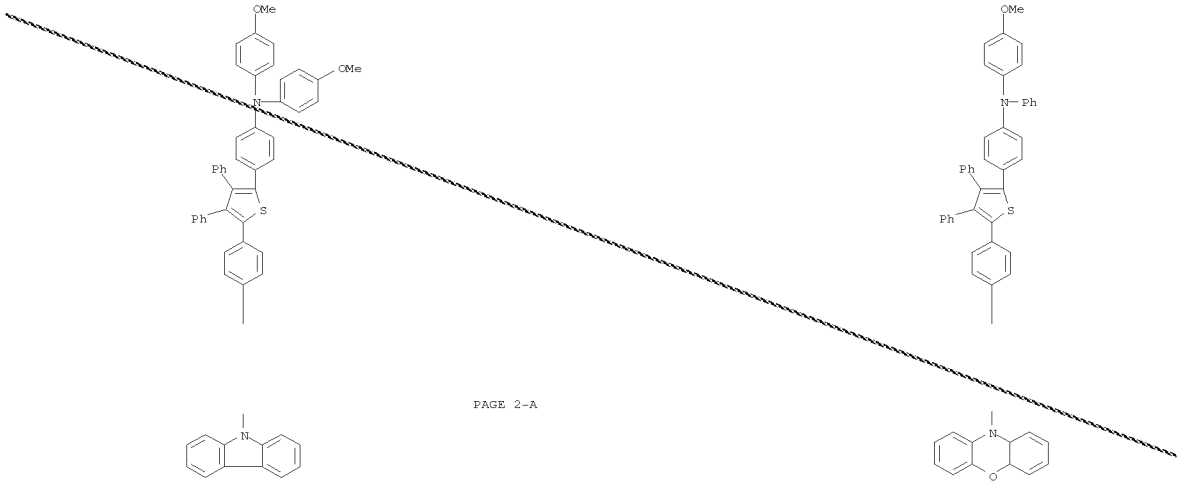
PAGE 2-A



RN 228869-86-1 CAPLUS
CN Benzenamine, 4-[5-[4-(9H-carbazol-9-yl)phenyl]-3,4-diphenyl-2-thienyl]-N,N-bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



RN 228869-92-9 CAPLUS
CN Benzenamine, 4-[5-[4-(4a,10a-dihydro-10H-phenoxazin-10-yl)phenyl]-3,4-diphenyl-2-thienyl]-N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



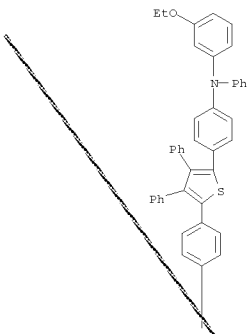
PAGE 2-A



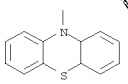
RN 228869-96-3 CAPLUS
CN Benzenamine, N-[4-[5-[4-(4a,10a-dihydro-10H-phenothiazin-10-yl)phenyl]-3,4-diphenyl-2-thienyl]phenyl]-3-ethoxy-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

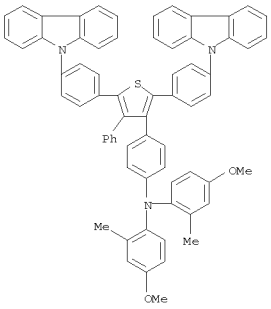


PAGE 2-A

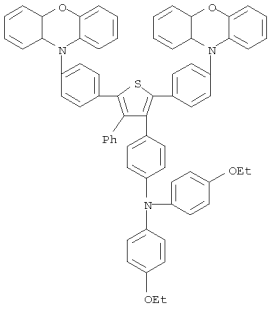


RN 228870-00-6 CAPLUS
CN Benzenamine, N-[4-[2,5-bis[4-(9H-carbazol-9-yl)phenyl]-4-phenyl-3-thienyl]phenyl]-4-methoxy-N-(4-methoxy-2-methylphenyl)-2-methyl- (9CI) (CA INDEX NAME)

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

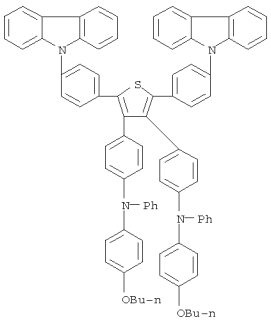


RN 228870-04-0 CAPLUS
CN Benzenamine, 4-[2,5-bis[4-(4a,10a-dihydro-10H-phenoxazin-10-yl)phenyl]-4-phenyl-3-thienyl]-N,N-bis(4-ethoxyphenyl)- (9CI) (CA INDEX NAME)

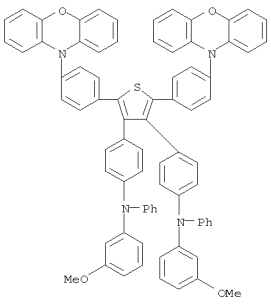


RN 228870-10-8 CAPLUS

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Benzenamine, 4,4'-[2,5-bis[4-(9H-carbazol-9-yl)phenyl]-3,4-thiophenediyl]bis[N-(4-butoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

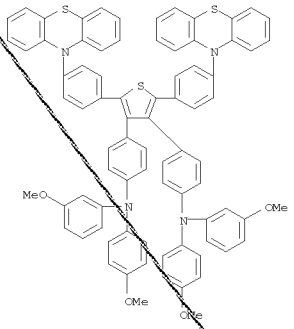


RN 228870-12-0 CAPLUS
CN Benzenamine, 4,4'-[2,5-bis[4-(10H-phenoxazin-10-yl)phenyl]-3,4-thiophenediyl]bis[N-(3-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 228870-14-2 CAPLUS
CN Benzenamine, 4,4'-[2,5-bis[4-(10H-phenothiazin-10-yl)phenyl]-3,4-

L19 ANSWER 138 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thiophenediyl]bis[N-(3-methoxyphenyl)-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 139 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:244657 CAPLUS
DOCUMENT NUMBER: 130:281985
TITLE: Preparation of arylthiophenes as PDE IV inhibitors
INVENTOR(S): Han, Yongxin; MacDonald, Dwight; Giroux, Andre; Young, Robert N.; Perrier, Helene; Lepine, Carole
PATENT ASSIGNEE(S): Merck Frosst Canada Inc., Can.
SOURCE: PCT Int. Appl., 133 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9918099 | A1 | 19990415 | WO 1998-CA931 | 19981001 |
| W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU | | | | |
| RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 6034089 | A | 20000307 | US 1998-163033 | 19980928 |
| CA 2305414 | A1 | 19990415 | CA 1998-2305414 | 19981001 |
| AU 9893347 | A | 19990427 | AU 1998-93347 | 19981001 |
| AU 732406 | B2 | 20010426 | | |
| EP 1019399 | A1 | 20000719 | EP 1998-946190 | 19981001 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO | | | | |
| JP 2001519347 | T | 20011023 | JP 2000-514910 | 19981001 |
| JP 3409029 | B2 | 20030519 | | |

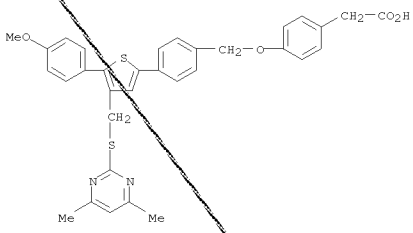
PRIORITY APPLN. INFO.: US 1997-60914P P 19971003
GB 1998-8109 A 19980416
WO 1998-CA931 W 19981001

OTHER SOURCE(S): MARPAT 130:281985
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

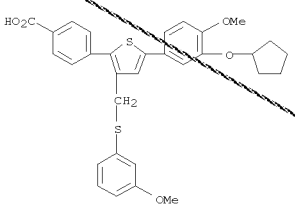
AB The title compds. [I; Ar1 = (un)substituted Ph, quinolinyl, pyridinyl, etc.; R1 = H, alkyl (optionally substituted with OH), X1Y1Ar2 (wherein X1 = CH2, a bond; Y1 = O, S, NH, etc.; Ar2 = (un)substituted Ph, naphthyl, pyrimidinyl, etc.); R2 = H, alkyl; R3 = (un)substituted Ph, naphthyl, pyridinyl, etc.], useful in the treatment of diseases, including asthma, by raising the level of cyclic adenosine-3',5'-monophosphate (cAMP) through the inhibition of phosphodiesterase IV (PDE IV), were prepared

L19 ANSWER 139 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
E.g., reaction of bromide II with lithium 2-(4-N-methylpiperazino)pyridine-5-trimethylboronate salt in the presence of Pd(PPh3)4 in DME/H2O afforded thiophene III. The instant compds. I showed IC50 of 1 nM - 5 μM against PDE IV in human whole blood assay and IC50 of 0.1 nM - 5 μM in human mononuclear cell assay.
IT 222839-54-5P 222840-29-1P 222840-43-9P 222840-45-1P 222840-52-0P 222840-57-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of arylthiophenes as PDE IV inhibitors)
RN 222839-54-5 CAPLUS
CN Benzeneacetic acid, 4-[[4-[4-[[(4,6-dimethyl-2-pyrimidinyl)thio]methyl]-5-(4-methoxyphenyl)-2-thienyl]phenyl]methoxy]- (9CI) (CA INDEX NAME)

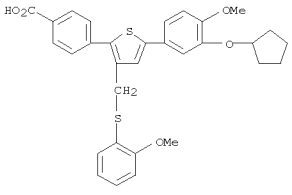


RN 222840-29-1 CAPLUS
CN Benzoic acid, 4-[5-[3-(cyclopentyloxy)-4-methoxyphenyl]-3-[[(3-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 139 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

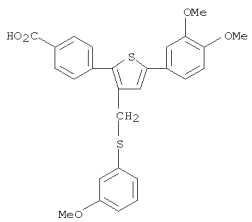


RN 222840-43-9 CAPLUS
CN Benzoic acid, 4-[5-[3-(cyclopentyloxy)-4-methoxyphenyl]-3-[[(2-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

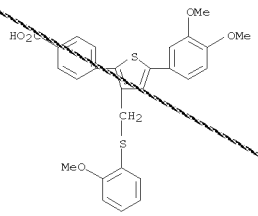


RN 222840-45-1 CAPLUS
CN Benzoic acid, 4-[5-(3,4-dimethoxyphenyl)-3-[[(3-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 139 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

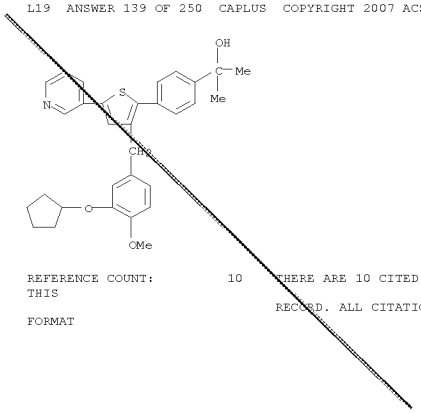


RN 222840-52-0 CAPLUS
CN Benzoic acid, 4-[5-(3,4-dimethoxyphenyl)-3-[[(2-methoxyphenyl)thio]methyl]-2-thienyl]- (9CI) (CA INDEX NAME)



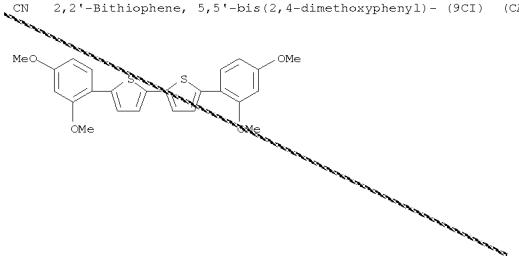
RN 222840-57-5 CAPLUS
CN Benzenemethanol, 4-[3-[[3-(cyclopentyloxy)-4-methoxyphenyl]methyl]-5-(3-pyridinyl)-2-thienyl]-α,α-dimethyl- (9CI) (CA INDEX NAME)

L19 ANSWER 139 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

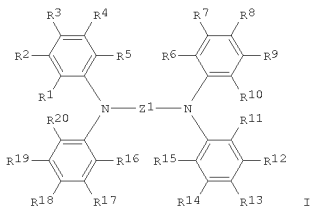
L19 ANSWER 140 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:122253 CAPLUS
DOCUMENT NUMBER: 130:325056
TITLE: Friedel-Crafts type reaction of chlorothiophenes with aromatic compounds and its application to the syntheses of aryl- and oligothiophenes
AUTHOR(S): Sone, Tyo; Sato, Kazuaki
CORPORATE SOURCE: Fac. Eng., Yamagata Univ., Yonezawa, 992-8510, Japan
SOURCE: Yamagata Daigaku Kiyo, Kogaku (1999), 25(2), 69-85
CODEN: YDKKAR; ISSN: 0085-834X
PUBLISHER: Yamagata Daigaku
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:325056
AB Chlorothiophenes react with active aromatic compds. in the presence of AlCl3 under mild conditions, yielding the corresponding arylthiophenes. Similarly, chlorinated bi- and terthiophenes are produced as the main products in the AlCl3-catalyzed self-condensation of the chlorothiophenes. The reactions are discussed in terms of an ionic mechanism involving the thiophenium ions produced by the protonation of the chlorothiophenes. Versatility of the products for the syntheses of arylthiophenes, mixed thiophene-arene oligomers, and oligothiophenes is also demonstrated.
IT 223675-01-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(Friedel-Crafts type reactions of chlorothiophenes)
RN 223675-01-2 CAPLUS
CN 2,2'-Bithiophene, 5,5'-bis(2,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

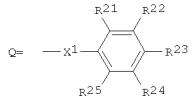


L19 ANSWER 141 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:651124 CAPLUS
DOCUMENT NUMBER: 129:308409
TITLE: Positive-hole injection material for organic electroluminescent device
INVENTOR(S): Enokida, Toshio; Onikubo, Shunichi; Tamano, Michiko; Okutsu, Satoshi
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 43 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 10265773 | A | 19981006 | JP 1997-69911 | 19970324 |
| PRIORITY APPLN. INFO.: | | | JP 1997-69911 | 19970324 |

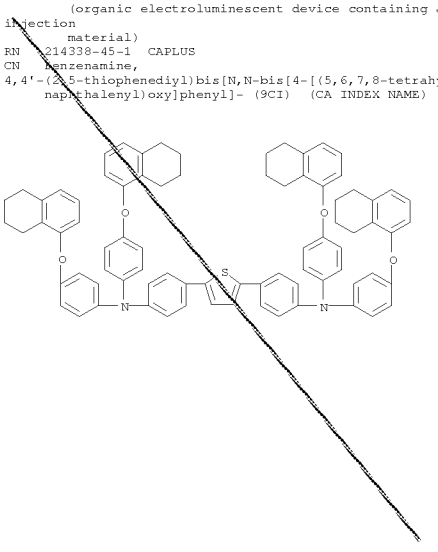
OTHER SOURCE(S): MARPAT 129:308409
GI





AB The material has a formula I [R1-20 = H, halo, alkyl, alkoxy, thioalkoxy, amino, monocyclic group, polycyclic group, Q; R21-25 = H, halo, alkyl, alkoxy, thioalkoxy, amino, monocyclic group, polycyclic group; R21-25 may form a cycloalkyl ring, aryl ring; X1 = direct bond, alkylene, (CR26R27)xO(CR28R29)y, (CR30R31)xS(CR32R33)y, O, S, CO, SO2, SiR34(R35), NR36, PR37, PO(R38); x, y = 0-8 integer; x + y ≠ 0; Z1 = Ar1, Ar2NR39Ar3, Ar4NR40Ar5NR41Ar6; Ar1-6 = arylene; R26-41 = alkyl, monocyclic group, polycyclic group]. The device shows high luminance, efficiency,

L19 ANSWER 141 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
long life, and storage stability.
IT 214338-45-1
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(organic electroluminescent device containing aromatic pos.-hole injection material)
RN 214338-45-1 CAPLUS
CN Benzenamine, 4,4'-(2,5-thiophenediyl)bis[N,N-bis[4-[(5,6,7,8-tetrahydro-1-naphthalenyl)oxy]phenyl]- (9CI) (CA INDEX NAME)



L19 ANSWER 142 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:531855 CAPLUS
DOCUMENT NUMBER: 129:260997
TITLE: Design, synthesis, and electrochemical polymerization of conjugated monomers with tetrahedral geometry: towards three-dimensional conductors
AUTHOR(S): Marsella, Michael J.; Li, Hong; Reid, Rodney J.
CORPORATE SOURCE: Department of Chemistry, University of California at Riverside, Riverside, CA, 92521, USA
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(2), 521-522
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB He design, synthesis, and potential applications of conjugated mols. with two- and three-dimensional geometries is discussed. The synthesis of tetrahedral thiophene-based monomers with conjugation extending in three dimensions is described. The electrochem. polymerization of the monomers is also discussed with emphasis on the potential for obtaining high-mol.-weight polymers which retain the characteristics of small-mol. conductors.

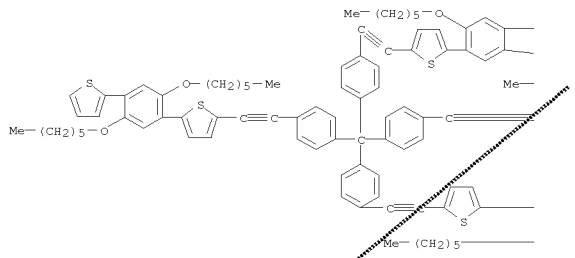
IT 213701-51-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(design, synthesis, and electrochem. polymerization of conjugated monomers with tetrahedral geometry as route towards three-dimensional conductors)
RN 213701-51-0 CAPLUS
CN Thiophene, 2,2',2'',2'''-[methanetetrayltetrakis(4,1-phenylene-2,1-ethynediyl)]tetrakis[5-[2,5-bis(hexyloxy)-4-(2-thienyl)phenyl]-, homopolymer (9CI) (CA INDEX NAME)

CM 1

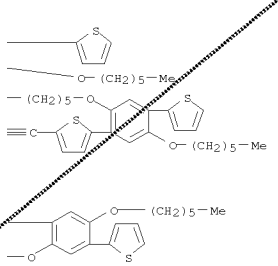
CRN 213701-50-9
CMF C137 H148 O8 S8

L19 ANSWER 142 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



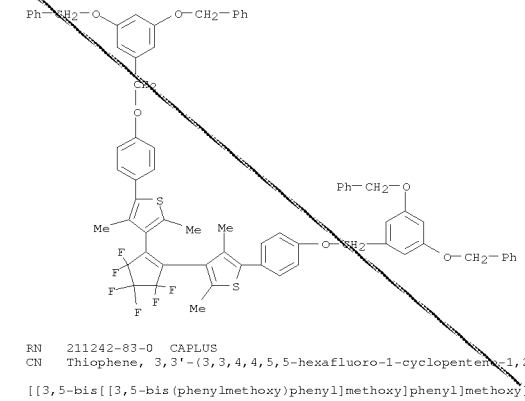
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 143 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:480858 CAPLUS
DOCUMENT NUMBER: 129:168019
TITLE: Aggregation of dendrimers with a photochromic dithienylethene core group on the mica surface-atomic force microscopic imaging
AUTHOR(S): Hellmann, Jorg; Hamano, Mitsuo; Karthaus, Olaf; Ijiro, Kuniharu; Shimomura, Masatsugu; Irie, Masahiro
CORPORATE SOURCE: Department of Chemistry and Biochemistry, Graduate School of Engineering, Kyushu University, Hakozaki, Higashi-ku. Fukutoka, 812, Japan
SOURCE: Japanese Journal of Applied Physics, Part 2: Letters (1998), 37(7A), L816-L819
CODEN: JAPLD8; ISSN: 0021-4922
PUBLISHER: Japanese Journal of Applied Physics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Atomic force microscopic (AFM) imaging revealed that a polyether third generation dendrimer having a photochromic dithienylethene core group forms regularly aligned (hexagonal alignment) droplets of more or less equal size (100-120 nm) and height of the long axis of the dendrimer (5.0 ± 0.5 nm) on a mica surface when the surface is rinsed with a benzene solution of the dendrimer. The size suggests that one droplet contains around 104 dendrimers. The subtle balance among surface hydrophilicity, hydrophobicity of solvent and dendrimers, and structure or shape of the dendrimers is considered to control the regular alignment.

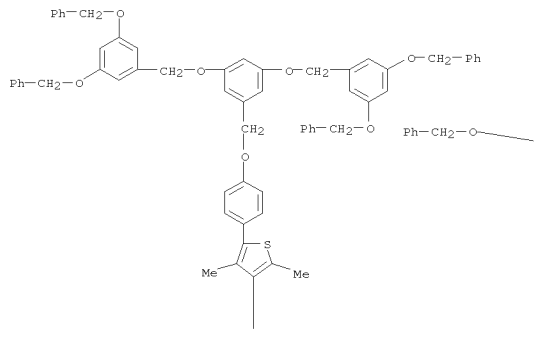
IT 211242-81-8P 211242-83-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(aggregation of dendrimers with photochromic dithienylethene core group on mica surface-atomic force microscopic imaging)
RN 211242-81-8 CAPLUS
CN Thiophene, 3,3'-(3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[5-[4-[[3,5-bis(phenylmethoxy)phenyl]methoxy]phenyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

L19 ANSWER 143 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



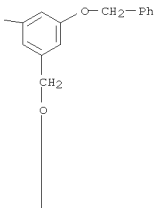
RN 211242-83-0 CAPLUS
CN Thiophene, 3,3'-(3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[5-[4-[[3,5-bis[[3,5-bis(phenylmethoxy)phenyl]methoxy]phenyl]methoxy]phenyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

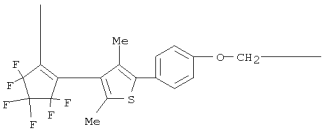


L19 ANSWER 143 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

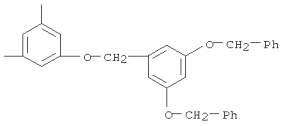


PAGE 2-A



L19 ANSWER 143 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B

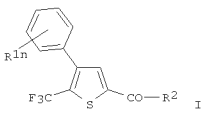


REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 144 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:353085 CAPLUS
DOCUMENT NUMBER: 129:24482
TITLE: Preparation of thiophene-2-carboxylic acid derivatives as agrochemical microbicides
INVENTOR(S): Fischer, Reiner; Lui, Norbert; Dutzmann, Stefan; Haenssler, Gerd
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 28 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 19649093 | A1 | 19980528 | DE 1996-19649093 | 19961127 |
| WO 9823605 | A1 | 19980604 | WO 1997-EP6368 | 19971114 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9854824 | A | 19980622 | AU 1998-54824 | 19971114 |
| EP 944615 | A1 | 19990929 | EP 1997-951205 | 19971114 |
| R: BE, CH, DE, FR, GB, IT, LI, NL, PT | | | | |
| JP 2001504832 | T | 20010410 | JP 1998-524220 | 19971114 |
| US 6013664 | A | 20000111 | US 1999-308903 | 19990526 |
| PRIORITY APPLN. INFO.: | | | DE 1996-19649093 | A 19961127 |
| | | | WO 1997-EP6368 | W 19971114 |

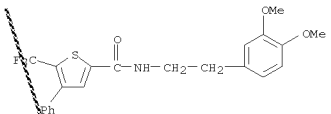
OTHER SOURCE(S): CASREACT 129:24482; MARPAT 129:24482
GI



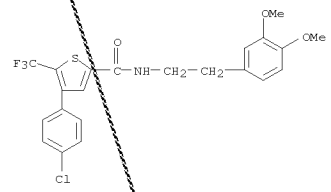
AB The title compds. I [R1 = halo, CN, NO2, (halo)alkyl, (halo)alkoxy, (halo)alkylthio, Ph or PhO; n = 0-5; R2 = OH, SH, (un)substituted NH2, etc.] are prepared as agrochem. bactericides and fungicides.
IT 208108-48-9P 208108-66-1P 208108-71-8P
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. as agrochem. microbicide)

L19 ANSWER 144 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

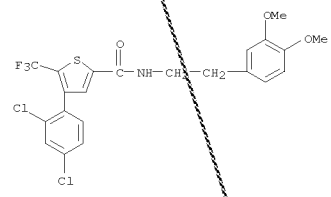
RN 208108-48-9 CAPLUS
CN 2-Thiophenecarboxamide, N-[2-(3,4-dimethoxyphenyl)ethyl]-4-phenyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 208108-66-1 CAPLUS
CN 2-Thiophenecarboxamide, 4-(4-chlorophenyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 208108-71-8 CAPLUS
CN 2-Thiophenecarboxamide, 4-(2,4-dichlorophenyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



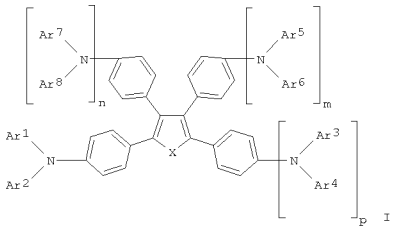
L19 ANSWER 144 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:314121 CAPLUS
DOCUMENT NUMBER: 129:60393
TITLE: Organic electroluminescent device
INVENTOR(S): Nakatsuka, Masakatsu; Kitamoto, Noriko
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 10125468 | A | 19980515 | JP 1997-217720 | 19970812 |
| JP 3870288 | B2 | 20070117 | | |
| JP 2007049177 | A | 20070222 | JP 2006-257035 | 20060922 |
| PRIORITY APPLN. INFO.: | | | JP 1996-230118 | A 19960830 |
| | | | JP 1997-217720 | A3 19970812 |

OTHER SOURCE(S): MARPAT 129:60393
GI

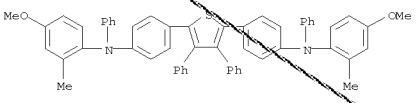


AB The invention relates to an organic electroluminescent device that comprises the organic compound represented by I [Ar1-8 = (un)substituted aryl group; X = O or S; m,n,p = 0 or 1], sandwiched between a pair of electrodes.

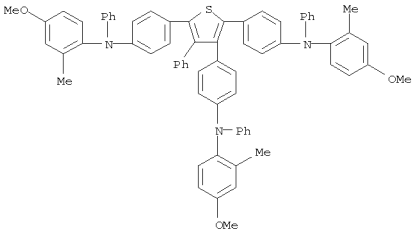
IT 123715-38-8 123715-39-9 208599-72-8 208599-73-9 208599-75-1 208599-76-2 208599-83-1 208599-84-2 208599-91-1 208599-92-2
RL: DEV (Device component use); USES (Uses)

L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(org. electroluminescent device)

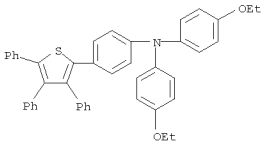
RN 123715-38-8 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 123715-39-9 CAPLUS
CN Benzenamine, 4,4',4''-(4-phenyl-2,3,5-thiophenetriyl)tris[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

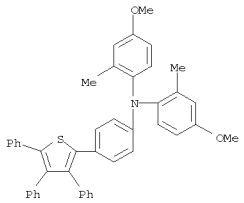


RN 208599-72-8 CAPLUS
CN Benzenamine, N,N-bis(4-ethoxyphenyl)-4-(3,4,5-triphenyl-2-thienyl)- (9CI) (CA INDEX NAME)

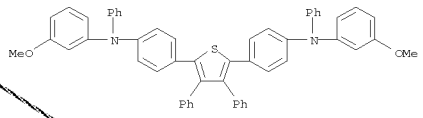


RN 208599-73-9 CAPLUS
CN Benzenamine, 4-methoxy-N-(4-methoxy-2-methylphenyl)-2-methyl-N-[4-(3,4,5-triphenyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)

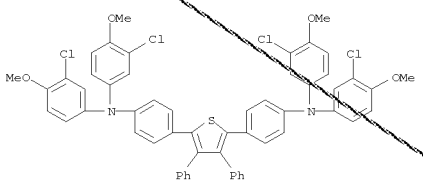
L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 208599-75-1 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N-(3-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

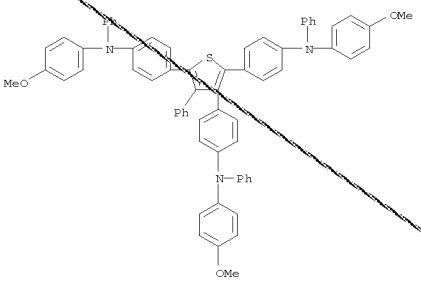


RN 208599-76-2 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N,N-bis(3-chloro-4-methoxyphenyl)- (9CI) (CA INDEX NAME)

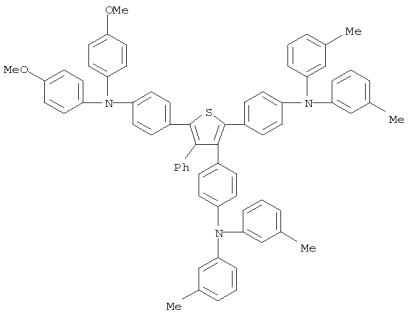


RN 208599-83-1 CAPLUS
CN Benzenamine, 4,4',4''-(4-phenyl-2,3,5-thiophenetriyl)tris[N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

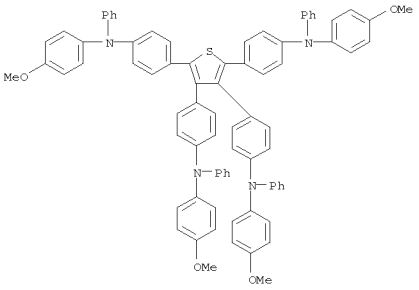


RN 208599-84-2 CAPLUS
CN Benzenamine, 4,4'-[5-[4-[bis(4-methoxyphenyl)amino]phenyl]-4-phenyl-2,3-thiophenediyl]bis[N,N-bis(3-methylphenyl)- (9CI) (CA INDEX NAME)



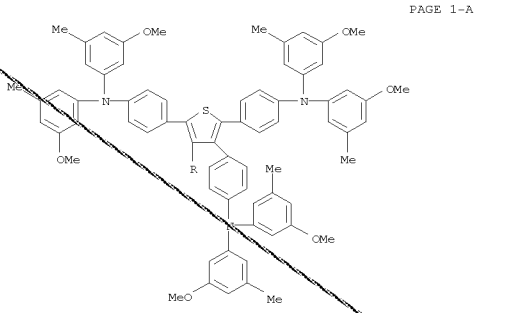
RN 208599-91-1 CAPLUS
CN Benzenamine, 4,4',4'',4'''-(2,3,4,5-thiophenetetrayl)tetrakis[N-(4-methoxyphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



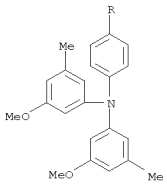
RN 208599-92-2 CAPLUS
CN Benzenamine, 4,4',4'',4'''-(2,3,4,5-thiophenetetrayl)tetrakis[N,N-bis(3-methoxy-5-methylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 145 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



L19 ANSWER 146 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

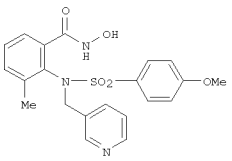
ACCESSION NUMBER: 1998:251153 CAPLUS
DOCUMENT NUMBER: 128:308308
TITLE: The preparation and use of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors
INVENTOR(S): Levin, Jeremy Ian; Du Mila, T.; Venkatesan, Aranapakam
Mudumbai; Nelson, Frances Christy; Zask, Arie; Gu, Yansong
PATENT ASSIGNEE(S): American Cyanamid Company, USA
SOURCE: PCT Int. Appl., 164 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9816503 | A2 | 19980423 | WO 1997-US18280 | 19971008 |
| WO 9816503 | A3 | 19980528 | | |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, SZ, BE, FR, GR, IE, IT, MC, NL, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2268894 | A1 | 19980423 | CA 1997-2268894 | 19971008 |
| AU 9851458 | A | 19980511 | AU 1998-51458 | 19971008 |
| AU 731737 | B2 | 20010405 | | |
| EP 938471 | A1 | 19990901 | EP 1997-946246 | 19971008 |
| EP 938471 | B1 | 20011212 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO | | | | |
| BR 9712525 | A | 19991019 | BR 1997-12525 | 19971008 |
| CN 1240429 | A | 20000105 | CN 1997-180613 | 19971008 |
| HU 200000641 | A2 | 20001028 | HU 2000-641 | 19971008 |
| HU 200000641 | A3 | 20010228 | | |
| JP 2001504809 | T | 20010410 | JP 1998-518448 | 19971008 |
| AT 210637 | T | 20011215 | AT 1997-946246 | 19971008 |
| ES 2166102 | T3 | 20020401 | ES 1997-946246 | 19971008 |
| PT 938471 | T | 20020531 | PT 1997-946246 | 19971008 |
| ZA 9709233 | A | 19990415 | ZA 1997-9233 | 19971015 |
| TW 410220 | B | 20001101 | TW 1997-86114187 | 19971015 |
| KR 2000049196 | A | 20000725 | KR 1999-703294 | 19990415 |
| HK 1021178 | A1 | 20020404 | HK 2000-100090 | 20000106 |

PRIORITY APPLN. INFO.: US 1996-732631 A 19961016
WO 1997-US18280 W 19971008

OTHER SOURCE(S): MARPAT 128:308308
GI

L19 ANSWER 146 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



II

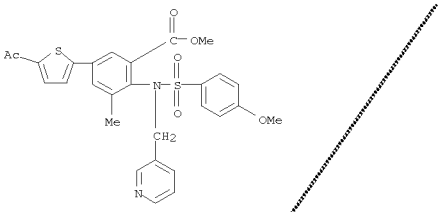
AB The invention relates to novel, low mol. weight, non-peptide inhibitors of matrix metalloproteinases (e.g. gelatinases, stromelysins and collagenases) and TNF-α converting enzyme (TACE, tumor necrosis factor-α converting enzyme). The compds. are useful for the treatment of diseases in which these enzymes are implicated such as arthritis, tumor growth and metastasis, angiogenesis, tissue ulceration, abnormal wound healing, periodontal disease, bone disease, proteinuria, aneurysmal aortic disease, degenerative cartilage loss following traumatic joint injury, demyelinating diseases of the nervous system, graft rejection, cachexia, anorexia, inflammation, fever, insulin resistance, septic shock, congestive heart failure, inflammatory disease of the central nervous system, inflammatory bowel disease, HIV infection, age related macular degeneration, diabetic retinopathy, proliferative vitreoretinopathy, retinopathy of prematurity, ocular inflammation, keratoconus, Sjogren's syndrome, myopia, ocular tumors, and ocular angiogenesis/neovascularization. The invention compds. are represented by the formula ZSO2N(CH2R7)ACONHOH [I; A = (un)substituted Ph or naphthyl; Z = (un)substituted aryl, heteroaryl, or benzo-fused heteroaryl; R7 = H, (un)substituted alk(en/yn)yl, Ph, naphthyl, 5- or 6-membered heteroaryl, cycloalkyl, or cycloheteroalkyl; or R7CH2NA forms a non-aromatic 1,2-benzo-fused 7- to 10-membered heterocyclic ring with an optional addition benzo fusion; where the hydroxamic acid moiety and the sulfonamido moiety are bonded to adjacent carbons on group A], and include pharmaceutically acceptable salts, optical isomers, and diastereomers. Prepns. of over 400 compds., including I and their intermediates, are given. For instance, 2-[(4-methoxybenzenesulfonyl)amino]-3-methylbenzoic acid Me ester (preparation given) was N-alkylated by 3-picolyl chloride-HCl (83%), followed by hydrolysis of the ester with LiOH in aqueous THF (100%), activation with oxalyl chloride, and hydroxamidation with NH2OH.HCl (51%), to give title compound II. At 50 mg/kg/day in rats with cartilage implants, II gave 44.6% inhibition of cartilage weight loss, and 51.2% inhibition of cartilage collagen loss.

L19 ANSWER 146 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 206549-35-1P 206549-36-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors)

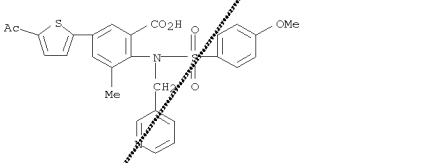
RN 206549-35-1 CAPLUS

CN Benzoic acid, 5-(5-acetyl-2-thienyl)-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl-, methyl ester (9CI) (CA INDEX NAME)



RN 206549-36-2 CAPLUS

CN Benzoic acid, 5-(5-acetyl-2-thienyl)-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl- (9CI) (CA INDEX NAME)



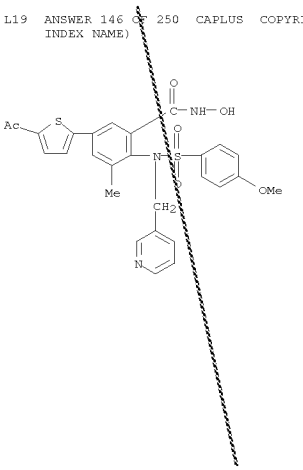
IT 206549-37-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of ortho-sulfonamido aryl hydroxamic acids as matrix metalloproteinase and TACE inhibitors)

RN 206549-37-3 CAPLUS

CN Benzamide, 5-(5-acetyl-2-thienyl)-N-hydroxy-2-[[(4-methoxyphenyl)sulfonyl](3-pyridinylmethyl)amino]-3-methyl- (9CI) (CA

L19 ANSWER 146 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

INDEX NAME)



L19 ANSWER 147 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

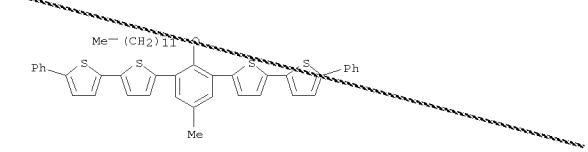
ACCESSION NUMBER: 1998:229645 CAPLUS
DOCUMENT NUMBER: 128:270353
TITLE: π-Dimers of Prototype High-Spin Polaronic Oligomers
AUTHOR(S): van Haare, John A. E. H.; van Boxtel, Marc; Janssen, Rene A. J.
CORPORATE SOURCE: Laboratory of Organic Chemistry, Eindhoven University of Technology, Eindhoven, 5600 MB, Neth.
SOURCE: Chemistry of Materials (1998), 10(4), 1166-1175
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 128:270353

AB Novel well-defined oligomers consisting of two dopable π-conjugated segments, 2,2'-bipyrrole or 2,2'-bithiophene, linked via 1,3-phenylene and end-capped with Ph groups have been synthesized using palladium-catalyzed cross-coupling reactions. The mols. are considered as prototypical examples for polaronic ferromagnetic chains based on pyrrole and thiophene units, which have been proposed as candidates for organic magnetic materials. The oligomers are designed to investigate whether high-spin (i.e. triplet-state) oligocations can be obtained after oxidative doping. We find that the oligomers can be oxidized to the corresponding di(cation radical)s, in which each heterocyclic segment is singly oxidized and carries an unpaired electron, as required for a high-spin state. While these di(cation radical)s are stable at ambient temperature, UV/visible/near-IR and ESR spectroscopy reveals that the singly charged cation radical segments reversibly form π-dimers in solution, especially at low temps. This π-dimerization involves the intermol. antiferromagnetic pairing of electron spins and is detrimental for the formation of high-spin oligomers or polymers via the polaronic concept with oxidized oligopyrrole or oligothiophene segments as spin-carrying units.

IT 205510-28-7
RL: FMU (Formation, unclassified); PRP (Properties); FORM (Formation, nonpreparative)
(π-dimers of prototype high-spin polaronic oligomers)

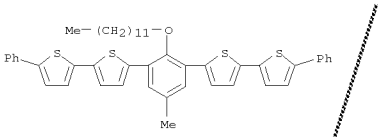
RN 205510-28-7 CAPLUS

CN 2,2'-Bithiophene, 5,5''-[2-(dodecyloxy)-5-methyl-1,3-phenylene]bis[5'-phenyl-, radical ion(2+) (9CI) (CA INDEX NAME)

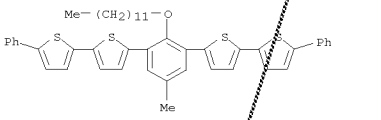


IT 205436-45-9
RL: FMU (Formation, unclassified); PRP (Properties); RCT (Reactant); FORM

L19 ANSWER 147 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(Formation, nonpreparative); RACT (Reactant or reagent)
(π-dimers of prototype high-spin polaronic oligomers)
RN 205436-45-9 CAPLUS
CN 2,2'-Bithiophene, 5,5''-[2-(dodecyloxy)-5-methyl-1,3-phenylene]bis[5'-phenyl-, radical ion(1+) (9CI) (CA INDEX NAME)



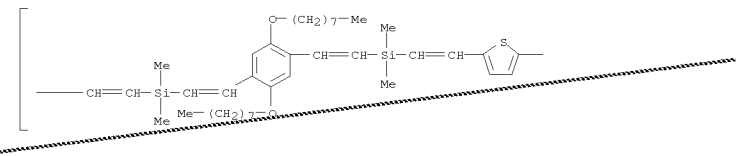
IT 205436-40-4P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(π-dimers of prototype high-spin polaronic oligomers)
RN 205436-40-4 CAPLUS
CN 2,2'-Bithiophene, 5,5''-[2-(dodecyloxy)-5-methyl-1,3-phenylene]bis[5'-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

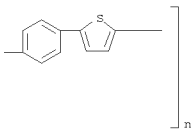
L19 ANSWER 148 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:224220 CAPLUS
DOCUMENT NUMBER: 128:230937
TITLE: Synthesis and photophysics of silylene-tethered divinylarene copolymers
AUTHOR(S): Chen, Ruey-Min; Deng, Z. B.; Sun, G.; Lee, Shuit-Tong; Luh, Tien-Yau
CORPORATE SOURCE: Department of Chemistry National Taiwan University, Taipei, 106, Taiwan
SOURCE: Polymer Preprints (American Chemical Society, Division of Polymer Chemistry) (1998), 39(1), 89
CODEN: ACPPAY; ISSN: 0032-3934
PUBLISHER: American Chemical Society, Division of Polymer Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hydrosilylation of bis-arylynes with bis(vinylsilylhydrides) yields silylene-tethered divinylarene polymers containing aryl or aryl-thiophene groups in the main chain. Polymers with aryl groups in the main chain exhibit dual fluorescence spectra and the intensity in the blue light region increases with mol. weight Intramol. interaction between luminophores in the polymers, both at the ground and at the excited states might occur.
The polymers exhibited an electroluminescence band at 460 nm.
IT 204577-89-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(synthesis and fluorescence and electroluminescence of silylene-tethered divinylarene and arene-thiophene copolymers)
RN 204577-89-9 CAPLUS
CN Poly[2,5-thiophenediyl-1,4-phenylene-2,5-thiophenediyl-1,2-ethenediyl(dimethylsilylene)-1,2-ethenediyl[2,5-bis(octyloxy)-1,4-phenylene]-1,2-ethenediyl(dimethylsilylene)-1,2-ethenediyl] (9CI) (CA INDEX NAME)

PAGE 1-A



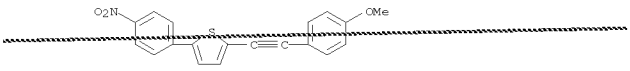
L19 ANSWER 148 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 149 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:129418 CAPLUS
DOCUMENT NUMBER: 128:217243
TITLE: Preparation and characterization of new substituted phenylthienylacetylenes: comparison of three possible pathways
AUTHOR(S): Latassa, D.; Prim, D.; Kirsch, G.
CORPORATE SOURCE: Groupe de Synthese Organique et Heterocyclique, Laboratoire de Chimie Organique, Universite de Metz Ile du Saulcy, METZ, F-57 012, Fr.
SOURCE: Heterocyclic Communications (1998), 4(1), 81-94
CODEN: HCOMEX; ISSN: 0793-0283
PUBLISHER: Freund Publishing House Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The synthesis of new substituted phenyl(thienyl)acetylenes is studied starting from selenadiazole rings, β-chloro acroleines and substituted Ph or thienyl acetylenes.
IT 204277-13-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 204277-13-4 CAPLUS
CN Thiophene, 2-[(4-methoxyphenyl)ethynyl]-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

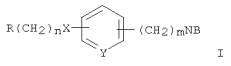
L19 ANSWER 150 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:87730 CAPLUS
DOCUMENT NUMBER: 128:154084
TITLE: Preparation of aralkylazoles as tyrosine kinase inhibitors useful as antitumor agents.
INVENTOR(S): Momose, Yu; Matsutani, Etsuya
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd., Japan
SOURCE: PCT Int. Appl., 151 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9803505 | A2 | 19980129 | WO 1997-JP2479 | 19970717 |
| WO 9803505 | A3 | 19980625 | | |
| W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HU, IL, IS, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU | | | | |
| RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| CA 2260999 | A1 | 19980129 | CA 1997-2260999 | 19970717 |
| CA 2260999 | C | 20060711 | | |
| AU 9734616 | A | 19980210 | AU 1997-34616 | 19970717 |
| EP 912562 | A1 | 19990506 | EP 1997-930819 | 19970717 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| CN 1223653 | A | 19990721 | CN 1997-195822 | 19970717 |
| CN 1077107 | B | 20020102 | | |
| EP 1270571 | A1 | 20030102 | EP 2002-79001 | 19970717 |
| EP 1270571 | B1 | 20060906 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| AT 338754 | T | 20060915 | AT 2002-79001 | 19970717 |
| ZA 9706378 | A | 19990119 | ZA 1997-6378 | 19970718 |
| JP 11060571 | A | 19990302 | JP 1997-193709 | 19970718 |
| US 6211215 | B1 | 20010403 | US 1998-180955 | 19981118 |
| CN 1349990 | A | 20020522 | CN 2001-119519 | 20010518 |

PRIORITY APPLN. INFO.: JP 1996-191100 A 19960719
JP 1997-155177 A 19970612
EP 1997-930819 A3 19970717
WO 1997-JP2479 W 19970717

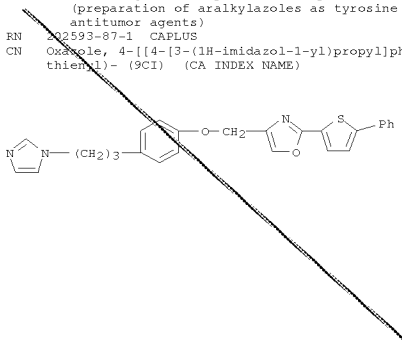
OTHER SOURCE(S): MARPAT 128:154084
GI

L19 ANSWER 150 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

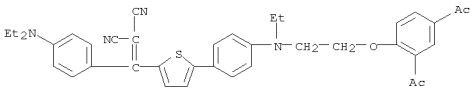


I

AB Title compds. [I; R = (substituted) heteroaryl; X = O, (oxidized) S, CO, CH(OH); Y = CH, N; m = 0-10; n = 1-5; NB = (substituted) aromatic azolyl; ring containing Y is optionally further substituted], were prepared Thus,
3-[4-[2-[(E)-phenylethenyl]-4-oxazolylmethoxy]phenyl]propyl methanesulfonate (preparation given) was added to a mixture of imidazole and NaH
in DMF followed by stirring for 1.5 h at 70° to give 4-[4-[3-(1-imidazolyl)propyl]phenoxymethyl]-2-[(E)-2-phenylethenyl]oxazole. The latter inhibited proliferation of MDA-MB-453 human breast cancer cells with IC50 = 0.25 nM.
IT 202593-87-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aralkylazoles as tyrosine kinase inhibitors useful as antitumor agents)
RN 202593-87-1 CAPLUS
CN Oxazole, 4-[[4-[3-(1H-imidazol-1-yl)propyl]phenoxy]methyl]-2-(5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)

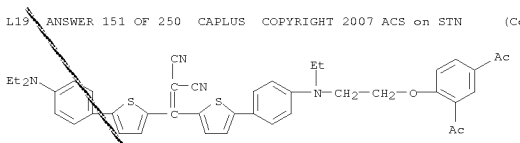


L19 ANSWER 151 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:62874 CAPLUS
DOCUMENT NUMBER: 128:128566
TITLE: High-Performance Polyquinolines with Pendent High-Temperature Chromophores for Second-Order Nonlinear Optics
AUTHOR(S): Jen, Alex K-Y.; Wu, Xiaoming; Ma, Hong
CORPORATE SOURCE: Department of Chemistry, Northeastern University, Boston, MA, 02115, USA
SOURCE: Chemistry of Materials (1998), 10(2), 471-473
CODEN: CMATEX; ISSN: 0897-4756
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A simple, generally applicable synthetic approach to side-chain second-order nonlinear optical (NLO) polyquinolines is described. A series of side-chain NLO polyquinolines and their copolymers was prepared via direct polymerization of a bis(ortho-aminoketone) monomer with the chromophore-functionalized bis(ketomethylene) monomers. A series of high-temperature and chemical stable chromophores were covalently attached onto the
polyquinoline backbones. These NLO side-chain polyquinolines possess high
glass-transition temperature (Tg > 200°), excellent processibility, thermal stability, and electrooptical properties. Poling results of these
polymers demonstrate large electrooptic coefficient (r33) value (up to 17 pm/V
measured at 0.83 μm) and good temporal alignment stability of polymer films (the R33 value retained more than 80% of the original values at 100° for more than 3000 h).
IT 201862-40-0P 201862-41-1P
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(in preparation of high-performance polyquinolines with pendent high-temperature
chromophores for second-order nonlinear optics)
RN 201862-40-0 CAPLUS
CN Propanedinitrile, [[5-[4-[[2-(2,4-diacetylphenoxy)ethyl]ethylamino]phenyl]-2-thienyl][4-(diethylamino)phenyl]methylene]- (9CI) (CA INDEX NAME)



RN 201862-41-1 CAPLUS
CN Propanedinitrile, [[5-[4-[[2-(2,4-diacetylphenoxy)ethyl]ethylamino]phenyl]-2-thienyl][5-[4-(diethylamino)phenyl]-2-thienyl]methylene]- (9CI) (CA INDEX NAME)

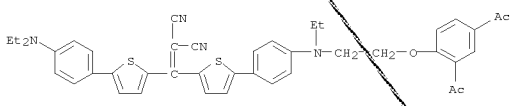
L19 ANSWER 151 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



IT 201862-42-2P 201862-44-4P 201862-45-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and elec., optical properties of high-performance polyquinolines with pendent high-temperature chromophores for second-order
nonlinear optics)
RN 201862-42-2 CAPLUS
CN Propanedinitrile, [[5-[4-[[2-(2,4-diacetylphenoxy)ethyl]ethylamino]phenyl]-2-thienyl][5-[4-(diethylamino)phenyl]-2-thienyl]methylene]-, polymer with [oxybis(6-amino-3,1-phenylene)]bis[phenylmethanone] and 1,1'-[[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]di-4,1-phenylene]bis[ethanone] (9CI) (CA INDEX NAME)

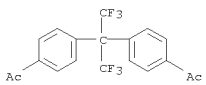
CM 1

CRN 201862-41-1
CMF C42 H40 N4 O3 S2



CM 2

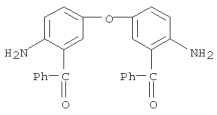
CRN 142059-49-2
CMF C19 H14 F6 O2



CM 3

CRN 59827-14-4
CMF C26 H20 N2 O3

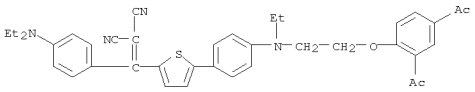
L19 ANSWER 151 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 201862-44-4 CAPLUS
CN Propanedinitrile,
[[5-[4-[[2-(2,4-diacetylphenoxy)ethyl]ethylamino]phenyl]-
2-thienyl][4-(diethylamino)phenyl]methylene]-, polymer with
[oxybis(6-amino-3,1-phenylene)]bis[phenylmethanone] (9CI) (CA INDEX
NAME)

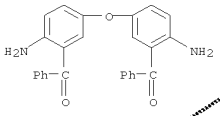
CM 1

CRN 201862-40-0
CMF C38 H38 N4 O3 S



CM 2

CRN 59827-14-4
CMF C26 H20 N2 O3

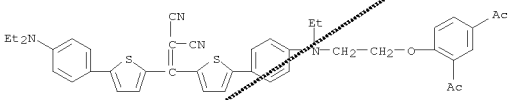


RN 201862-45-5 CAPLUS
CN Propanedinitrile,
[[5-[4-[[2-(2,4-diacetylphenoxy)ethyl]ethylamino]phenyl]-
2-thienyl][5-[4-(diethylamino)phenyl]-2-thienyl]methylene]-, polymer with
[oxybis(6-amino-3,1-phenylene)]bis[phenylmethanone] (9CI) (CA INDEX
NAME)

L19 ANSWER 151 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

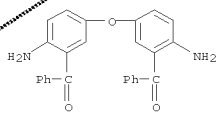
CM 1

CRN 201862-41-1
CMF C42 H40 N4 O3 S2



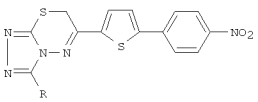
CM 2

CRN 59827-14-4
CMF C26 H20 N2 O3



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

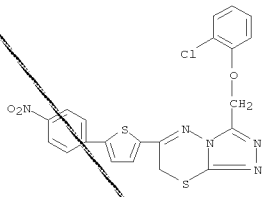
L19 ANSWER 152 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:495177 CAPLUS
DOCUMENT NUMBER: 127:149123
TITLE: Studies on thiophene heterocycles. II. Synthesis and biological activity of some
6-(5-aryl-2-thienyl)-7H-s-
triazolo[3,4-b]-1,3,4-thiadiazines
AUTHOR(S): Kalluraya, Bhalakrishna; Shetty, Suresh N.
CORPORATE SOURCE: Department of Studies in Chemistry, Mangalore University, Mangalagangotri, 574 199, India
SOURCE: Indian Journal of Heterocyclic Chemistry (1997), 6(4),
287-290
CODEN: IJCHEI; ISSN: 0971-1627
PUBLISHER: Lucknow University, Dep. of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



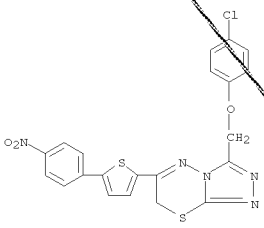
I

AB Title compds. I [R = H, alkyl, aryl, (aryloxy)methyl, substituted anilinomethyl] were prepared from amino-1,2,4-triazolethiols and 2-(bromoacetyl)-5-(4-nitrophenyl)thiophene. I were screened for antibacterial and antifungal activity. The chlorine-containing compds. were
significantly active against E. coli.
IT 193280-68-1P 193280-69-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antimicrobial activity of)
RN 193280-68-1 CAPLUS
CN 7H-1,2,4-Triazolo[3,4-b][1,3,4]thiadiazine,
3-[(2-chlorophenoxy)methyl]-6-
[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 152 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

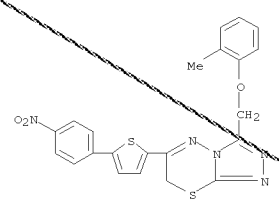


RN 193280-69-2 CAPLUS
CN 7H-1,2,4-Triazolo[3,4-b][1,3,4]thiadiazine,
3-[(4-chlorophenoxy)methyl]-6-
[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)

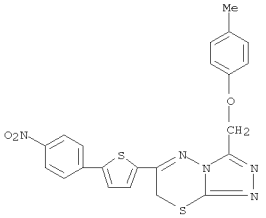


IT 193280-65-8P 193280-67-0P 193280-73-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 193280-65-8 CAPLUS
CN 7H-1,2,4-Triazolo[3,4-b][1,3,4]thiadiazine,
3-[(2-methylphenoxy)methyl]-6-
[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 152 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

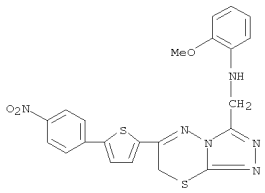


RN 193280-67-0 CAPLUS
CN 7H-1,2,4-Triazolo[3,4-b][1,3,4]thiadiazine, 3-[(4-methylphenoxy)methyl]-6-[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)



RN 193280-73-8 CAPLUS
CN 7H-1,2,4-Triazolo[3,4-b][1,3,4]thiadiazine-3-methanamine, N-(2-methoxyphenyl)-6-[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 152 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

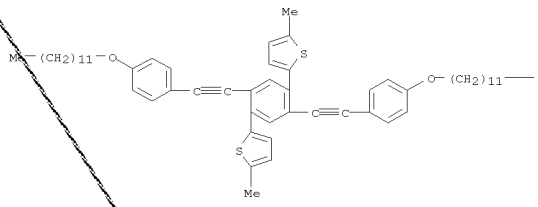


REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 153 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:324316 CAPLUS
DOCUMENT NUMBER: 127:17609
TITLE: Directed Electrophilic Cyclizations: Efficient Methodology for the Synthesis of Fused Polycyclic Aromatics
AUTHOR(S): Goldfinger, Marc B.; Crawford, Khushrav B.; Swager, Timothy M.
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA
SOURCE: Journal of the American Chemical Society (1997), 119(20), 4578-4593
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 127:17609
AB A versatile method for the synthesis of complex, fused, polycyclic, aromatic systems in high chemical yield is described. Construction is achieved using a general two-step synthetic sequence. Pd-catalyzed Suzuki and Negishi type cross-coupling chemistries allow for the preparation of non-fused skeletal ring systems in yields consistently >80%. The critical ring-forming step, which generally proceeds in very high to quant. yield, utilizes (4-alkoxyphenyl)ethynyl groups and is induced by strong electrophiles such as trifluoroacetic acid and iodonium tetrafluoroborate. The reaction in essence produces phenanthrene moieties which are integrated into extended polycyclic aromatic structures. Fused polycyclic benzenoids as well as benzenoid/thiophene systems may be prepared by this methodol. The scope of the described cross-coupling/cyclization chemical including mechanistic insights and problematic side reactions are described.
IT 190371-95-0P 190372-07-7P 190372-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(cross-coupling/cyclization chemical in preparation of fused polycyclic aroms.)
RN 190371-95-0 CAPLUS
CN Thiophene, 2,2'-[2,5-bis[[4-(dodecyloxy)phenyl]ethynyl]-1,4-phenylene]bis[5-methyl- (9CI) (CA INDEX NAME)

L19 ANSWER 153 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

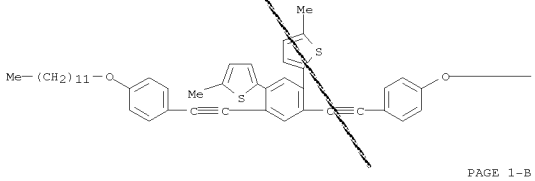


PAGE 1-B

—Me

RN 190372-07-7 CAPLUS
CN Thiophene, 2,2'-[4,6-bis[[4-(dodecyloxy)phenyl]ethynyl]-1,3-phenylene]bis[5-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

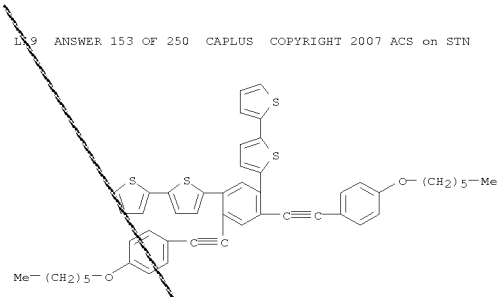


PAGE 1-B

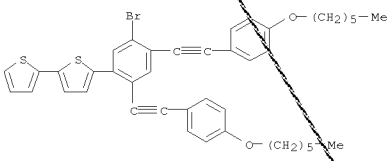
— $(CH_2)_{11}$ —Me

RN 190372-10-2 CAPLUS
CN 2,2'-Bithiophene, 5,5''-[4,6-bis[[4-(hexyloxy)phenyl]ethynyl]-1,3-phenylene]bis- (9CI) (CA INDEX NAME)

L19 ANSWER 153 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

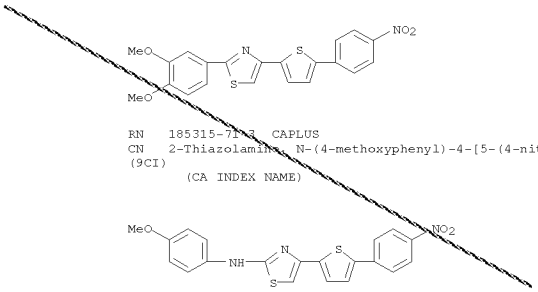


IT 190372-11-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(cross-coupling/cyclization chemical in preparation of fused polycyclic aroms.)
RN 190372-11-3 CAPLUS
CN 2,2'-Bithiophene, 5-[5-bromo-2,4-bis[[4-(hexyloxy)phenyl]ethynyl]phenyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 81 THERE ARE 81 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L19 ANSWER 154 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:748862 CAPLUS
DOCUMENT NUMBER: 126:59901
TITLE: Studies on arylthiophene heterocycles. Part 1. Synthesis and biological activity of some 2-aryl/arylamino-4-[5-(p-nitrophenyl)-2-thienyl)] thiazoles
AUTHOR(S): Kalluraya, Balakrishna; Shetty, Suresh N.
CORPORATE SOURCE: Department Studies Chemistry, Mangalore University, Mangalagongotri, 574 199, India
SOURCE: Oriental Journal of Chemistry (1996), 12(2), 141-144
CODEN: OJCHEG; ISSN: 0970-020X
PUBLISHER: Oriental Scientific Publishing Co.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The preparation of sixteen new 2-aryl/arylamino-4-[5-(p-nitrophenyl)-2-thienyl]thiazoles is described. The new compds. were screened for their antibacterial activity against both Gram-pos. and Gram-neg. bacteria. The
screening results indicates that compds. carrying the arylamino substituent at the 2-position are more active.
IT 185315-68-8P 185315-71-3P 185315-72-4P
185315-78-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of bactericidal aryl/arylamino[(p-nitrophenyl)thienyl)]thiazole s)
RN 185315-68-8 CAPLUS
CN Thiazole, 2-(3,4-dimethoxyphenyl)-4-[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)

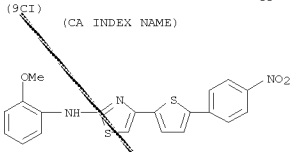


RN 185315-71-3 CAPLUS
CN 2-Thiazolamine, N-(4-methoxyphenyl)-4-[5-(4-nitrophenyl)-2-thienyl]- (9CI)
(CA INDEX NAME)

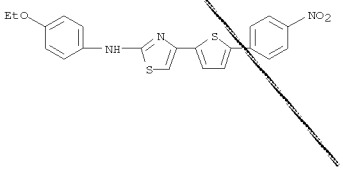


L19 ANSWER 154 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 185315-72-4 CAPLUS
CN 2-Thiazolamine, N-(2-methoxyphenyl)-4-[5-(4-nitrophenyl)-2-thienyl]- (9CI)
(CA INDEX NAME)

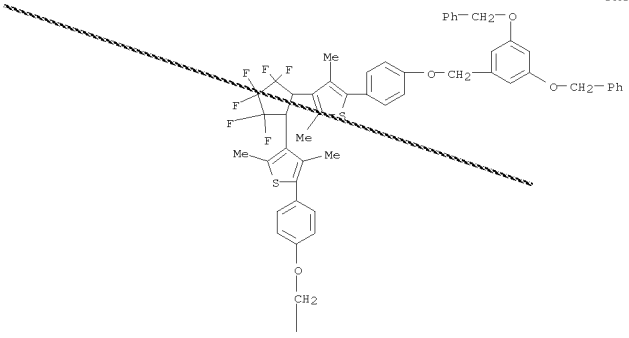


RN 185315-78-0 CAPLUS
CN 2-Thiazolamine, N-(4-ethoxyphenyl)-4-[5-(4-nitrophenyl)-2-thienyl]- (9CI) (CA INDEX NAME)



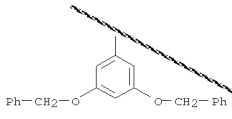
L19 ANSWER 155 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:718456 CAPLUS
DOCUMENT NUMBER: 126:8858
TITLE: Monomolecular Layers of Diarylethene-Containing Dendrimers
AUTHOR(S): Karthaus, O.; Ijiro, K.; Shimomura, M.; Hellmann, J.; Irie, M.
CORPORATE SOURCE: Research Institute for Electronic Science, Hokkaido University, Sapporo, Japan
SOURCE: Langmuir (1996), 12(26), 6714-6716
CODEN: LANGD5; ISSN: 0743-7463
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Monolayers of dendrimers of the diarylethene chromophore bisphenol derivative
were prepared by spreading the dilute benzene solution on a clear water surface.
The dendrimers showed an increasing surface pressure upon compression of a
spread film at the air-water interface. The dendrimer films could be transferred to solid supports by the conventional vertical dipping (Langmuir-Blodgett) method.
IT 184005-38-7P 184005-39-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of monomol. layers of diarylethene-containing
dendrimers)
RN 184005-38-7 CAPLUS
CN Thiophene, 3,3'-(3,3,4,4,5,5-hexafluoro-1,2-cyclopentanediyl)bis[5-[4-[[3,5-bis(phenylmethoxy)phenyl]methoxy]phenyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



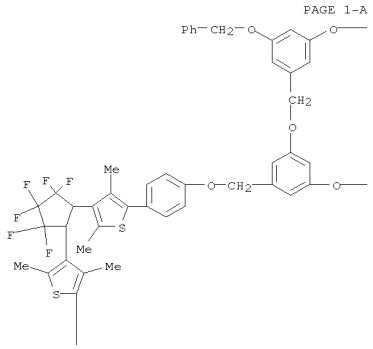
L19 ANSWER 155 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



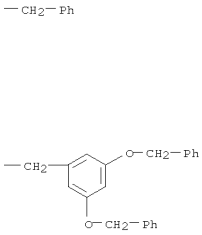
RN 184005-39-8 CAPLUS
CN Thiophene, 3,3'-(3,3,4,4,5,5-hexafluoro-1,2-cyclopentanediyl)bis[5-[4-[[3,5-bis[[3,5-bis(phenylmethoxy)phenyl]methoxy]phenyl]methoxy]phenyl]-2,4-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A

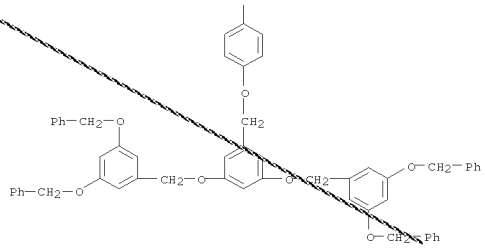


L19 ANSWER 155 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



PAGE 2-A



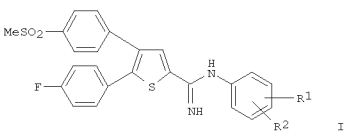
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 156 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:637056 CAPLUS
DOCUMENT NUMBER: 125:275634
TITLE: Preparation of phenylamidinothiophene derivatives as antiinflammatory agents
INVENTOR(S): Tanaka, Kiyomi; Nishida, Tokiko; Nakano, Jun; Inoue, Mamoru; Nakamura, Tsutomu; Debuchi, Hayami
PATENT ASSIGNEE(S): Kaken Pharmaceutical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9626204 | A1 | 19960829 | WO 1996-JP372 | 19960219 |
| W: AU, CA, CN, JP, KR, US | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2213537 | A1 | 19960829 | CA 1996-2213537 | 19960219 |
| AU 9646771 | A | 19960911 | AU 1996-46771 | 19960219 |
| EP 811620 | A1 | 19971210 | EP 1996-902482 | 19960219 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE | | | | |
| CN 1176639 | A | 19980318 | CN 1996-192134 | 19960219 |
| US 6048890 | A | 20000411 | US 1997-894627 | 19970822 |
| PRIORITY APPLN. INFO.: | | | JP 1995-37043 A | 19950224 |
| | | | WO 1996-JP372 W | 19960219 |

OTHER SOURCE(S): MARPAT 125:275634
GI



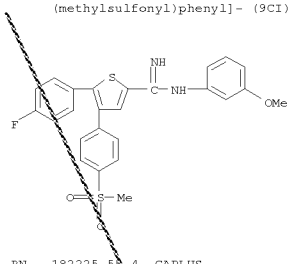
AB Phenylamidinothiophene derivs. represented by general formula (I; R1, R2 = H, halo, C1-4 alkyl or alkoxy) or pharmacol. acceptable salts thereof, which show antiinflammatory activity without digestive tract disorders (e.g stomach ulcer), and are useful for preventing and/or treating inflammatory diseases, collagen diseases, autoimmune diseases, other immune diseases, are prepared Thus, 300 mg 5-cyano-2-(4-fluorophenyl)-3-(4-methanesulfonylphenyl)thiophene was dissolved in 1,1,2,2-tetrachloroethane, treated with 226 mg AlCl3, stirred at room temperature for 1

L19 ANSWER 156 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

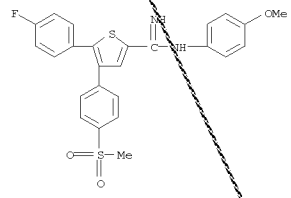
h, treated with 0.14 mL m-chloroaniline, and stirred at 100° for 8 h to give, after workup and silica gel chromatog., 356 mg I (R1 = 3-Cl, R2 = H). The latter compd. at 10 mg/kg p.o. per day for 17 days in vivo inhibited 31.5% arthritis in rat paws which was induced by direct s.c. administration of an adjuvant vs. 28.3% for indomethcin. It in vitro did not inhibit cyclooxygenase at 10-4 M, but indomethcin dose-dependently inhibited cyclooxygenase and showed complete inhibition at 10-4 M.

IT 182225-54-3P 182225-55-4P 182225-59-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylamidinothiophene derivs. as antiinflammatory agents)

RN 182225-54-3 CAPLUS
CN 2-Thiophenecarboximidamide, 5-(4-fluorophenyl)-N-(3-methoxyphenyl)-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

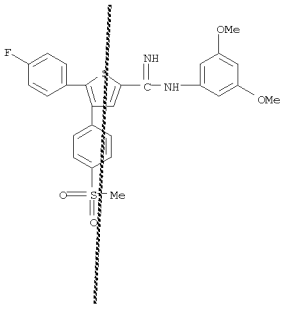


RN 182225-55-4 CAPLUS
CN 2-Thiophenecarboximidamide, 5-(4-fluorophenyl)-N-(4-methoxyphenyl)-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



RN 182225-59-8 CAPLUS
CN 2-Thiophenecarboximidamide, N-(3,5-dimethoxyphenyl)-5-(4-fluorophenyl)-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)

L19 ANSWER 156 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



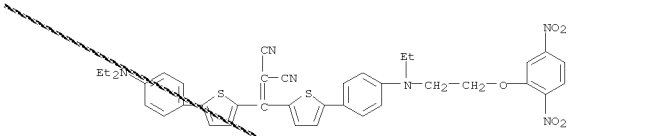
L19 ANSWER 157 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:498196 CAPLUS
DOCUMENT NUMBER: 125:233733
TITLE: Recent development of high performance electro-optic materials for device applications
AUTHOR(S): Jen, Alex K-Y.; Chen, Tian-An; Zhang, Yue; Liu, Yue-Jin; Zhang, XuanQi; Kenney, John T.; Dalton, Larry R.
CORPORATE SOURCE: ROI Technology, Monmouth Junction, NJ, 08852, USA
SOURCE: Polymeric Materials Science and Engineering (1996), 75, 312-313
CODEN: PMSEDG; ISSN: 0743-0515
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

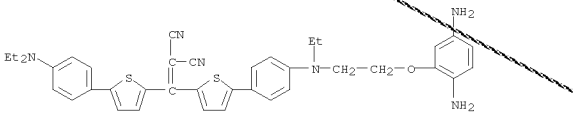
AB A new series of highly efficient (Bμ=2000-3000 x 10-48 esu) and thermally stable (>300C) nonlinear optical chromophores was developed.

IT 181815-17-8P 181815-18-9P
RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(recent development of high performance electro-optic materials for device applications)

RN 181815-17-8 CAPLUS
CN Propanedinitrile, [[5-[4-(diethylamino)phenyl]-2-thienyl][5-[4-[[2-(2,5-dinitrophenoxy)ethyl]ethylamino]phenyl]-2-thienyl]methylene]- (9CI) (CA INDEX NAME)



RN 181815-18-9 CAPLUS
CN Propanedinitrile, [[5-[4-[[2-(2,5-diaminophenoxy)ethyl]ethylamino]phenyl]-2-thienyl][5-[4-(diethylamino)phenyl]-2-thienyl]methylene]- (9CI) (CA INDEX NAME)



L19 ANSWER 157 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L19 ANSWER 158 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:485780 CAPLUS
DOCUMENT NUMBER: 125:142763
TITLE: Heterocyclyl substituted hydroxyacetamide derivatives as fungicides
INVENTOR(S): Doeller, Uwe; Braun, Peter; Sachse, Burkhard; Reissel, Willy; Ort, Oswald Peter Gerald; Hough, Thomas Lawley; Simpson, Donald James; Lindner, Kerstin; Lindell, Stephen David
PATENT ASSIGNEE(S): Agrevo UK Ltd., UK
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9617840 | A1 | 19960613 | WO 1995-GB2849 | 19951206 |
| W: AU, BG, BR, CA, CN, CZ, FI, HU, JP, KR, KZ, MX, NO, NZ, PL, RO, RU, SD, SK, UA, US | | | | |
| RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9642655 | A | 19960626 | AU 1996-42655 | 19951206 |
| PRIORITY APPLN. INFO.: | | | GB 1994-24553 A | 19941206 |
| | | | GB 1994-25971 A | 19941222 |
| | | | GB 1995-2865 A | 19950214 |
| | | | WO 1995-GB2849 W | 19951206 |

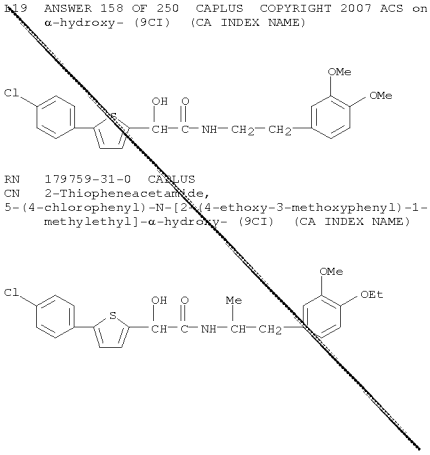
OTHER SOURCE(S): MARPAT 125:142763

AB Title compds. QZR1CEWY (Q = optionally substituted heterocyclyl; Z = optionally substituted hydroxy or mercapto; E = CONR2, CSNR2, C(:N)SR2; W = O, NR3, optionally substituted methylene or ethylene; R1, R2, R3 = Ph or alkyl, each of which is optionally substituted, or hydrogen; Y = Ph, heteroaryl or alkyl, each of which is optionally substituted, or hydrogen), useful as fungicides, were prepared Thus, reduction of 2-(3,5-dichloro-2-thienyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-2-oxoacetamide with NaBH4 gave 2-(3,5-dichloro-2-thienyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-2-hydroxyacetamide. N-[2-(2-bromo-4,5-dimethoxyphenyl)ethyl]-2-(2-bromo-3-thienyl)-2-hydroxyacetamide showed fungicidal activity against Pyricularia oryzae.

IT 179758-57-7P 179759-31-0P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclyl substituted hydroxyacetamide derivs. as fungicides)

RN 179758-57-7 CAPLUS
CN 2-Thiopheneacetamide, 5-(4-chlorophenyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-

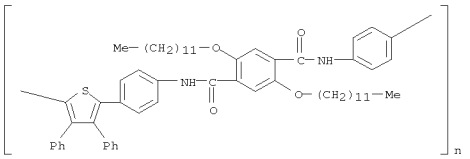
L19 ANSWER 158 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
α-hydroxy- (9CI) (CA INDEX NAME)



RN 179759-31-0 CAPLUS
CN 2-Thiopheneacetamide,
5-(4-chlorophenyl)-N-[2-(4-ethoxy-3-methoxyphenyl)-1-methylethyl]-α-hydroxy- (9CI) (CA INDEX NAME)

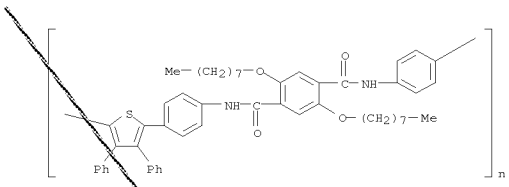


L19 ANSWER 159 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:305482 CAPLUS
DOCUMENT NUMBER: 125:11874
TITLE: Processible aromatic polyamides derived from 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene and aromatic diacid chlorides
AUTHOR(S): Lee, Won-Kyu; Lee, Kwang-Sup; Song, Hyun Hoon; Lee, Soo-Min
CORPORATE SOURCE: Department Macromolecular Science, Han Nam University, Taejon, 300-791, S. Korea
SOURCE: Polymers and Other Advanced Materials: Emerging Technologies andBusiness Opportunities, [Proceedings of the International Conference on Frontiers of Polymers and Advanced Materials], 3rd, Kuala Lumpur, Jan. 16-20, 1995 (1995), Meeting Date 1995, 385-392. Editor(s): Prasad, Paras N.; Mark, James E.; Tung, Joo Fai. Plenum: New York, N. Y.
CODEN: 62SQAO
DOCUMENT TYPE: Conference
LANGUAGE: English
AB Structural characteristics of the title aromatic polythiophene-polyamides, prepared via low-temperature polymerization, are discussed. The results showed layer structures for these rigid polymers.
IT 160362-93-6 177261-19-7 177261-21-1
177261-24-4
RL: PRP (Properties)
(structural characterization of processible aromatic polyamides derived from bis(aminophenyl)diphenylthiophene and aromatic diacid chlorides)
RN 160362-93-6 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl[2,5-bis(dodecyloxy)-1,4-phenylene]carbonylimino-1,4-phenylene] (9CI) (CA INDEX NAME)

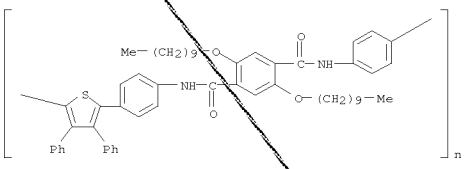


RN 177261-19-7 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl[2,5-bis(octyloxy)-1,4-phenylene]carbonylimino-1,4-phenylene] (9CI) (CA INDEX

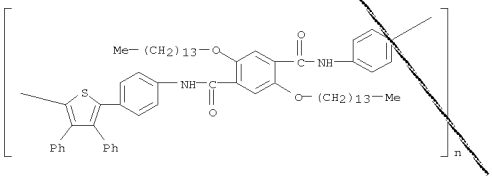
L19 ANSWER 159 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
NAME)



RN 177261-21-1 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl[2,5-bis(decyloxy)-1,4-phenylene]carbonylimino-1,4-phenylene] (9CI) (CA INDEX NAME)



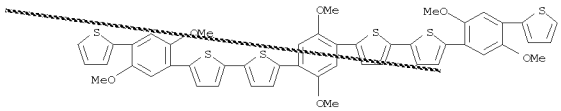
RN 177261-24-4 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl[2,5-bis(tetradecyloxy)-1,4-phenylene]carbonylimino-1,4-phenylene] (9CI) (CA INDEX NAME)



L19 ANSWER 160 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:200132 CAPLUS
DOCUMENT NUMBER: 124:246135
TITLE: Organic superlattice material, production thereof and device therefrom
INVENTOR(S): Hamano, Koji; Kurata, Tetsuyuki; Fuchigami, Hiroyuki; Nobutoki, Eiji; Fukada, Che; Nakao, Yukyasu
PATENT ASSIGNEE(S): Mitsubishi Electric Corp, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

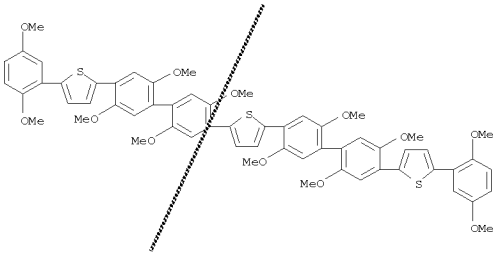
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 07325329 | A | 19951212 | JP 1994-120058 | 19940601 |
| JP 2975530 | B2 | 19991110 | | |
| PRIORITY APPLN. INFO.: | | | JP 1994-120058 | 19940601 |

AB An organic material, suitable for use as nonlinear optical and electronic materials, is prepared by laminating ≥2 kind of organic thin films having a thickness 0.5-100 nm, wherein the organic thin film comprises π-conjugated linear oligomers.
IT 174896-19-6 174896-20-9
RL: DEV (Device component use); USES (Uses)
(organic superlattice material, production thereof and device therefrom)
RN 174896-19-6 CAPLUS
CN 2,2'-Bithiophene,
5,5''-(2,5-dimethoxy-1,4-phenylene)bis[5'-[2,5-dimethoxy-4-(2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



RN 174896-20-9 CAPLUS
CN Thiophene, 2,5-bis[4'-[5-(2,5-dimethoxyphenyl)-2-thienyl]-2,2',5,5'-tetramethoxy[1,1'-biphenyl]-4-yl]- (9CI) (CA INDEX NAME)

L19 ANSWER 160 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 161 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1996:54155 CAPLUS
DOCUMENT NUMBER: 124:177567
TITLE: Novel second-order nonlinear optical polyimides
AUTHOR(S): Yu, Dong; Gharavi, Ali; Yu, Luping
CORPORATE SOURCE: Department Chemistry, University Chicago, Chicago, IL, 60637, USA
SOURCE: Proceedings of SPIE-The International Society for Optical Engineering (1995), 2527(Nonlinear Optical Properties of Organic Materials VIII, 1995), 127-36
CODEN: PSISDG; ISSN: 0277-786X
PUBLISHER: SPIE-The International Society for Optical Engineering
DOCUMENT TYPE: Journal
LANGUAGE: English

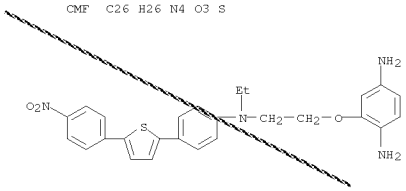
AB A general approach to the synthesis of second-order nonlinear optical (NLO) polyimides exhibiting high thermal stability was developed. Several selected NLO chromophores were incorporated into the polyimide backbone. Phys. studies indicate that these polyimides exhibit long-term and high thermal stability in dipole orientation, relatively large electro-optic coeffs., and low optical loss. Although all of these properties are not optimized, the overall performances of these polyimides make them very attractive for practical applications. The synthetic approach is also versatile and will allow the syntheses of many other functional polymers.

IT 171368-29-9P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation and characterization of second-order nonlinear optical polyimides with high thermal stability)

RN 171368-29-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 2-[2-[ethyl[4-[5-(4-nitrophenyl)-2-thienyl]phenyl]amino]ethoxy]-1,4-benzenediamine (9CI) (CA INDEX NAME)

CM 1

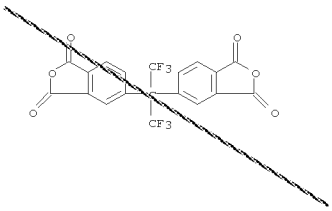
CRN 171368-27-7
CMF C26 H26 N4 O3 S



CM 2

L19 ANSWER 161 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 1107-00-2
CMF C19 H6 F6 O6



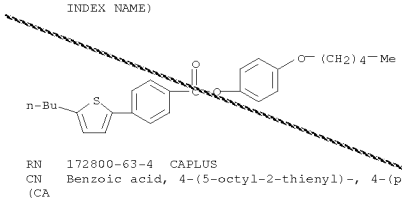
L19 ANSWER 162 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:977840 CAPLUS
DOCUMENT NUMBER: 124:102596
TITLE: X-ray diffraction studies of the liquid crystal phases of certain 4-n-alkoxyphenyl 4-(5-n-alkyl-2-thienyl)benzoates
AUTHOR(S): Bunning, John D.; Butcher, Jane L.; Byron, David J.; Matharu, Avtar S.; Wilson, Robert C.
CORPORATE SOURCE: Mater. Res. Inst., Sheffield Hallam Univ., Sheffield, S1 1WB, UK
SOURCE: Liquid Crystals (1995), 19(5), 693-8
CODEN: LICRE6; ISSN: 0267-8292
PUBLISHER: Taylor & Francis
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The Bu, octyl, decyl and dodecyl homologs of each of the 4-pentyloxyphenyl, 4-hexyloxyphenyl and 4-heptyloxyphenyl 4-(5-alkyl-2-thienyl)benzoates were prepared All the homologs gives rise to liquid crystal phases and their transition temps. are reported. Phase identification was not straightforward, especially when distinguishing between some of the higher order smectic phases, and required a combination of thermal optical measurements of smectic layer spacings.

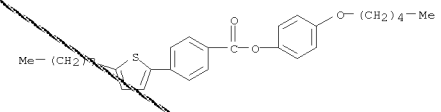
IT 172800-62-3P, 4-Pentyloxyphenyl 4-(5-butyl-2-thienyl)benzoate
172800-63-4P, 4-Pentyloxyphenyl 4-(5-octyl-2-thienyl)benzoate
172800-64-5P, 4-Pentyloxyphenyl 4-(5-decyl-2-thienyl)benzoate
172800-65-6P, 4-Pentyloxyphenyl 4-(5-dodecyl-2-thienyl)benzoate
172800-66-7P, 4-Hexyloxyphenyl 4-(5-butyl-2-thienyl)benzoate
172800-67-8P, 4-Hexyloxyphenyl 4-(5-octyl-2-thienyl)benzoate
172800-68-9P, 4-Hexyloxyphenyl 4-(5-decyl-2-thienyl)benzoate
172800-69-0P, 4-Hexyloxyphenyl 4-(5-dodecyl-2-thienyl)benzoate
172800-70-3P, 4-Heptyloxyphenyl 4-(5-butyl-2-thienyl)benzoate
172800-71-4P, 4-Heptyloxyphenyl 4-(5-octyl-2-thienyl)benzoate
172800-72-5P, 4-Heptyloxyphenyl 4-(5-decyl-2-thienyl)benzoate
172800-73-6P, 4-Heptyloxyphenyl 4-(5-dodecyl-2-thienyl)benzoate
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and liquid crystal properties of)

RN 172800-62-3 CAPLUS
CN Benzoic acid, 4-(5-butyl-2-thienyl)-, 4-(pentyloxy)phenyl ester (9CI) (CA INDEX NAME)

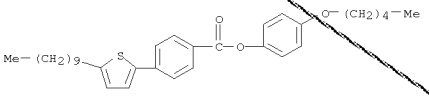


RN 172800-63-4 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 4-(pentyloxy)phenyl ester (9CI) (CA INDEX NAME)

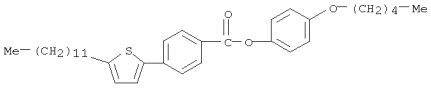
L19 ANSWER 162 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



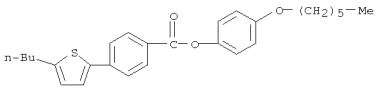
RN 172800-64-5 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 4-(pentyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 172800-65-6 CAPLUS
CN Benzoic acid, 4-(5-dodecyl-2-thienyl)-, 4-(pentyloxy)phenyl ester (9CI) (CA INDEX NAME)

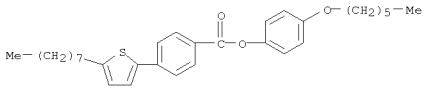


RN 172800-66-7 CAPLUS
CN Benzoic acid, 4-(5-butyl-2-thienyl)-, 4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)

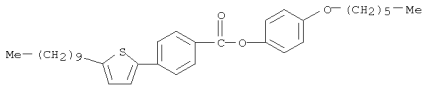


RN 172800-67-8 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)

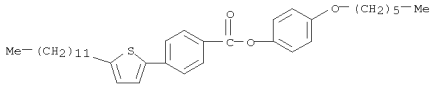
L19 ANSWER 162 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



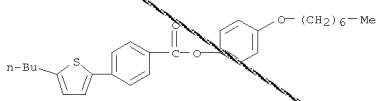
RN 172800-68-9 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 172800-69-0 CAPLUS
CN Benzoic acid, 4-(5-dodecyl-2-thienyl)-, 4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)

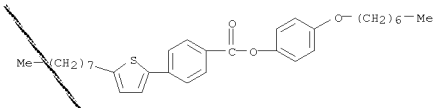


RN 172800-70-3 CAPLUS
CN Benzoic acid, 4-(5-butyl-2-thienyl)-, 4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)

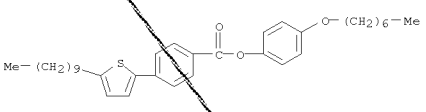


RN 172800-71-4 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)

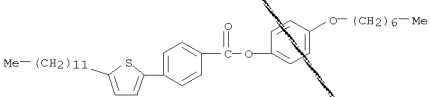
L19 ANSWER 162 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 172800-72-5 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 172800-73-6 CAPLUS
CN Benzoic acid, 4-(5-dodecyl-2-thienyl)-, 4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)

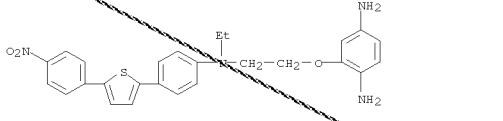


L19 ANSWER 163 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:938817 CAPLUS
DOCUMENT NUMBER: 124:30528
TITLE: Novel Aromatic Polyimides for Nonlinear Optics
AUTHOR(S): Yu, Dong; Gharavi, Ali; Yu, Luping
CORPORATE SOURCE: Department of Chemistry, University of Chicago, Chicago, IL, 60637, USA
SOURCE: Journal of the American Chemical Society (1995), 117(47), 11680-6
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A general approach to the synthesis of second-order nonlinear optical (NLO) polyimides exhibiting high thermal stability has been developed. Several selected NLO chromophores have been incorporated into the polyimide backbone. Detailed phys. studies showed that these polymers are very promising for practical applications. Three of these polyimides are soluble in common organic solvents, offering the ease of processing. High glass temps., around 230 °C, assure a long-term NLO stability at elevated temps., such as 150 °C. Low optical loss was observed for those soluble polymers. The synthetic approach is also versatile and will allow the syntheses of many other functional polymers.

IT 171368-27-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(monomer; preparation and characterization of novel aromatic polyimides for nonlinear optics)

RN 171368-27-7 CAPLUS
CN 1,4-Benzenediamine, 2-[2-[ethyl[4-[5-(4-nitrophenyl)-2-thienyl]phenyl]amino]ethoxy]- (9CI) (CA INDEX NAME)



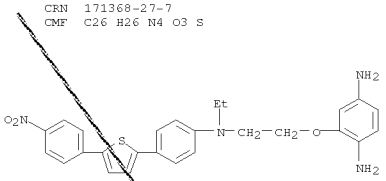
IT 171368-29-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of novel aromatic polyimides for nonlinear optics)

RN 171368-29-9 CAPLUS
CN 1,3-Isobenzofurandione, 5,5'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis-, polymer with 2-[2-[ethyl[4-[5-(4-nitrophenyl)-2-thienyl]phenyl]amino]ethoxy]-1,4-benzenediamine (9CI) (CA INDEX NAME)

CM 1

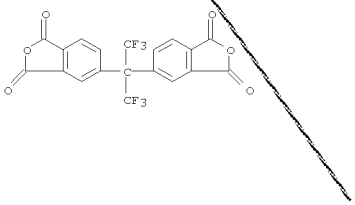
L19 ANSWER 163 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 171368-27-7
CMF C26 H26 N4 O3 S



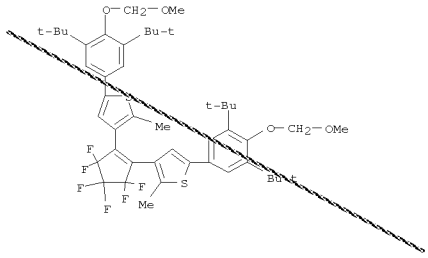
CM 2

CRN 1107-00-2
CMF C19 H6 F6 O6



L19 ANSWER 164 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:762771 CAPLUS
DOCUMENT NUMBER: 123:270563
TITLE: A dual-mode molecular switching device: bisphenolic diarylethenes with integrated photochromic and electrochromic properties
AUTHOR(S): Kawai, Stephen H.; Gilat, Sylvain L.; Ponsinet, Rachel; Lehn, Jean-Marie
CORPORATE SOURCE: Chem. Interactions Mol., Coll. France, Paris, 75005, Fr.
SOURCE: Chemistry--A European Journal (1995), 1(5), 285-93
Published in: Angew. Chem., Int. Ed. Engl., 34(15)
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: VCH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Dual-mode optical-elec. mol. switching device was prepared in which all three states are stable species. The spectral and redox properties are very well suited to form the basis of an erasable optical data storage system with nondestructive readout capacity. While photochem. writing and erasing may be carried out as for any photochrome-based system, the redox behavior allows for the written data to be safeguarded or locked by oxidation to the quinonoid form. Not only does this prevent erasing during the read process with visible light, but it also represents an amplification of the stored data, since the quinone absorbs approx. twice as strongly as the colored, photochromic form. A reduction process would then be used to unlock the information and permit subsequent photochem. erasing. The complete process is thus a five-step write-lock-read-unlock-erase cycle. Such a system is also of interest in that it allows for both deep and shallow memory modes within the same medium, since locked data would remain unaffected during the course of writing and erasing of temporarily stored information based solely on the photochromic forms of the device.
IT 169173-74-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); PREP (Preparation); USES (Uses)
(bisphenolic diarylethenes with integrated photochromic and electrochromic properties for dual-mode mol. switching device)
RN 169173-74-4 CAPLUS
CN Thiophene, 3,3'-(3,3,4,4,5,5-hexafluoro-1-cyclopentene-1,2-diyl)bis[5-[3,5-bis(1,1-dimethylethyl)-4-(methoxymethoxy)phenyl]-2-methyl- (9CI) (CA INDEX NAME)

L19 ANSWER 164 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

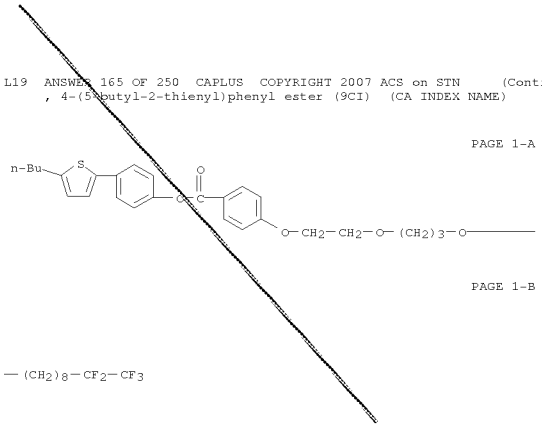


L19 ANSWER 165 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:740932 CAPLUS
DOCUMENT NUMBER: 123:127789
TITLE: Mesomorphic compound, liquid crystal composition containing the compound, liquid crystal device using the composition, liquid crystal apparatus and display method.
INVENTOR(S): Kosaka, Yoko; Takiguchi, Takao; Iwaki, Takashi; Togano, Takeshi; Nakamura, Shinichi
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Eur. Pat. Appl., 115 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 641850 | A1 | 19950308 | EP 1994-113906 | 19940905 |
| EP 641850 | B1 | 20000426 | | |
| R: CH, DE, ES, FR, GB, IT, LI, NL, SE | | | | |
| JP 07072442 | A | 19950317 | JP 1993-243579 | 19930906 |
| JP 07076543 | A | 19950320 | JP 1993-243578 | 19930906 |
| US 5868960 | A | 19990209 | US 1997-781062 | 19970109 |
| PRIORITY APPLN. INFO.: | | | JP 1993-243578 A | 19930906 |
| | | | JP 1993-243579 A | 19930906 |
| | | | US 1994-300527 B1 | 19940906 |

OTHER SOURCE(S): MARPAT 123:127789
AB A mesomorphic compound CmH2m+1(CH2)nO(CH2)pO(CH2)q-Y1-A1-R1 [R1 = H, halogen, CN, or a linear, branched or cyclized alkyl group having 1-30 C atoms capable of including at least one -CH2- group which can be replaced with -O-, -S-, -CO-, -CH(Cl)-, -CH(CN)-, -CCH3(CN)-, -CH:CH- or -C.tplbond.C- provided that heteroatoms are not adjacent to each other and capable of including at least one H which can be replaced with F; m, n, p and q = 1-16 provided that m + n + p + q ≤ 18; Y1 denotes a single bond, -O-, -CO-, -COO-, -OCO-, -CH:CH or -C.tplbond.C-; A1 = -A2-, -A2-X1-A3- or -A2-X1-A3-X2-A4 in which A2, A3 and A4 independently denote a divalent cyclic group; X1, X2 = a single bond, -COO-, -OCO-, -CH2O-, -OCH2-, -CH2CH2-, -CH:CH- or -C.tplbond.C-] having ≥2 ether groups between alkylene groups in a specific alkoxy perfluoroalkyl terminal group is suitable as a component for a liquid crystal composition providing improved response characteristics and a high contrast. A liquid crystal device is constituted by disposing the liquid crystal composition between a pair of substrates. The liquid crystal device is used as a display panel constituting a liquid crystal apparatus providing good display characteristics.
IT 166440-86-4
RL: MOA (Modifier or additive use); USES (Uses)
(perfluoroalkyl mesomorphic compound for liquid crystal composition)
RN 166440-86-4 CAPLUS
CN Benzoic acid, 4-[2-[3-[(9,9,10,10,10-pentafluorodecyl)oxy]propoxy]ethoxy]-

L19 ANSWER 165 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
, 4-(5-butyl-2-thienyl)phenyl ester (9CI) (CA INDEX NAME)



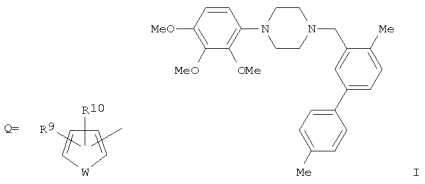

L19 ANSWER 166 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:308776 CAPLUS
DOCUMENT NUMBER: 122:81404
TITLE: Preparation of N-aralkylpiperazines and -piperidines as antiischemics
INVENTOR(S): McCort, Gary; Pascal, Jean-Claude; Blondet, Dominique;
Gellibert, Francoise
PATENT ASSIGNEE(S): Syntex Pharmaceuticals Ltd., UK
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 9424116 | A1 | 19941027 | WO 1994-EP1085 | 19940406 |
| W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KP, KR, KZ, LK, LU, LV, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, UA, UZ, VN | | | | |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| US 5428037 | A | 19950627 | US 1993-45568 | 19930409 |
| CA 2160113 | A1 | 19941027 | CA 1994-2160113 | 19940406 |
| AU 9465660 | A | 19941108 | AU 1994-65660 | 19940406 |
| EP 693062 | A1 | 19960124 | EP 1994-913550 | 19940406 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE | | | | |
| BR 9406209 | A | 19960206 | BR 1994-6209 | 19940406 |
| CN 1120838 | A | 19960417 | CN 1994-191728 | 19940406 |
| JP 08508741 | T | 19960917 | JP 1994-522707 | 19940406 |
| US 5545645 | A | 19960813 | US 1995-401486 | 19950309 |
| FI 9504718 | A | 19951004 | FI 1995-4718 | 19951004 |

PRIORITY APPLN. INFO.: US 1993-45568 A 19930409
WO 1994-EP1085 W 19940406

OTHER SOURCE(S): CASREACT 122:81404; MARPAT 122:81404
GI

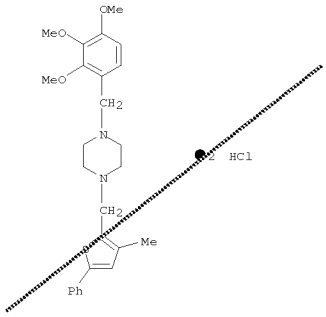
L19 ANSWER 166 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)




I

AB ACHR1(CH2)mNR2R3 [A = aryl group Q, R11R12C6H3; R1 = H, OH, alkyl; R2 = H,
alkyl; R3 = XCHR5(CH2)nR4; R2R3 = (CH2CH2)2Y(CH2)pCHR5(CH2)qR4, CH2CR4R5ZCH2CH2; R4 = H, (cyclo)alkyl, (un)substituted Ph; R5 = (un)substituted Ph; R9 = alkyl, (un)substituted Ph; R10 = H, alkyl; R11 = alkyl, (un)substituted aryl; R12 = H, alkyl(oxy), halo, CF3; W = O, S, (alkyl)imino; X = (CH2)p, piperidine-1,4-diyl; Y = CH, CHO, CHS, N; Z = CH2, NH, S, O; m, n, q = 0 or 1; p = 0-3] were prepared Thus, prepared title
compound I.2HCl gave 59% protection against exptl. ischemia in mice at 50μg/kg i.p. twice/day for 7 days.
IT 160416-79-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-aralkylpiperazines and -piperidines as antiischemics)
RN 160416-79-5 CAPLUS
CN Piperazine, 1-[(3-methyl-5-phenyl-2-thienyl)methyl]-4-[(2,3,4-trimethoxyphenyl)methyl]-, dihydrochloride (9CI) (CA INDEX NAME)

L19 ANSWER 166 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



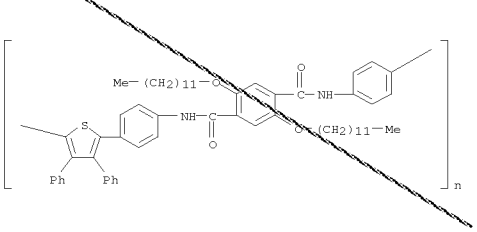
L19 ANSWER 167 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:272673 CAPLUS
DOCUMENT NUMBER: 122:56696
TITLE: Novel thermotropic liquid crystalline polymers: rigid and semi-rigid polymers with flexible side chains
AUTHOR(S): Lee, Kwang-Sup; Lee, Won-Kyu; Lee, Soo-Min; Kim, Hea-Ok; Le, Byung-Woon
CORPORATE SOURCE: Dep. Macromol. Sci., Han Nam Univ., Taejon, 300-791, S. Korea
SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1994), 254, 37-48
CODEN: MCLCE9; ISSN: 1058-725X
PUBLISHER: Gordon & Breach
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Two series of rigid and semi-rigid polyesters and polyamides with flexible side chains were prepared by solution, melt and interfacial polycondensation of 2,5-dialkoxyterephthaloyl chloride with various diols and diamines. The thermal behavior of the polymers were studied by DSC, TGA and polarizing microscopy. The results indicated that only rigid polymer systems form a nematic mesophase. However, none of the semi-rigid polymers formed nematic melts. The structures of both polyesters and polyamides were also examined by wide angle x-ray scattering. Anal. of sharp reflections, appearing at the lower angle of x-ray diffractograms of rigid polymers, suggested that rigid polymers crystallized to form a layered structure in the solid state.

IT 160362-93-6P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation, characterization and properties of rigid and semi-rigid thermotropic liquid crystalline polymers with flexible side chains)

RN 160362-93-6 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl[2,5-bis(dodecyloxy)-1,4-phenylene]carbonylimino-1,4-phenylene] (9CI) (CA INDEX NAME)



L19 ANSWER 167 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

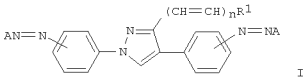
L19 ANSWER 168 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1995:252363 CAPLUS
DOCUMENT NUMBER: 122:42692
TITLE: Electrophotographic photoreceptor
INVENTOR(S): Hanatani, Yasuyuki; Kadoi, Mikio; Sakai, Hirosuke
PATENT ASSIGNEE(S): Mita Industrial Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 22 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

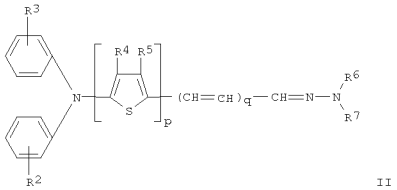
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 06130699 | A | 19940513 | JP 1992-278283 | 19921016 |

PRIORITY APPLN. INFO.: JP 1992-278283 19921016

GI



I



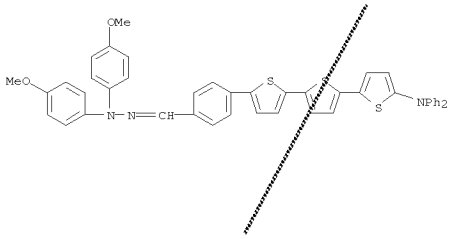
II

AB The title photoreceptor comprises a photosensitive layer(s) containing I [ A = coupler residual; R1 = H, alkyl, aryl, heterocyclyl; n = 0-1 ] as a charge generating material and II [ R2-R5 = H, halo, alkyl, alkoxy; R6, R7 = alkyl, aryl, aralkyl; p = 1-3; q = 0-1; R6 and R7 may form ring each other ] as a charge transporting material on a conductive support. The photoreceptor showed superior electrophotog. characteristics.

IT 159716-81-1
RL: DEV (Device component use); USES (Uses)
(charge transporting material of electrophotog. photoreceptor)

RN 159716-81-1 CAPLUS
CN Benzaldehyde, 4-[5''-(diphenylamino)[2,2':5',2''-terthiophen]-5-yl]-, bis(4-methoxyphenyl)hydrazone (9CI) (CA INDEX NAME)

L19 ANSWER 168 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



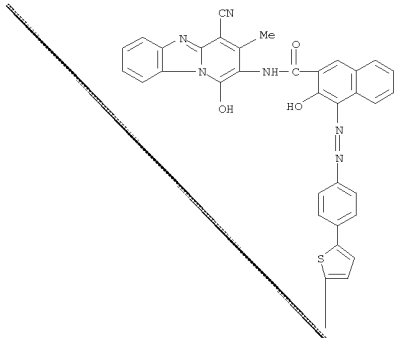
L19 ANSWER 169 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:545281 CAPLUS
DOCUMENT NUMBER: 121:145281
TITLE: High-sensitivity electrophotographic photoreceptor
INVENTOR(S): Hatsutori, Yoshimasa; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co Ltd, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 05303222 | A | 19931116 | JP 1992-105014 | 19920424 |
| PRIORITY APPLN. INFO.: | | | JP 1992-105014 | 19920424 |

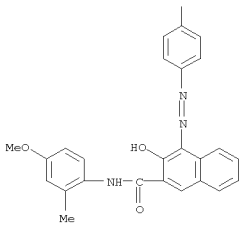
AB The title electrophotog. photoreceptor utilizes a carrier-generating material expressed as (CPA)-N:N-X-N:N-(CPB) [X = aromatic hydrocarbon or unsatd. heterocyclic group, the preceding groups linked via vinylene, O, CO, CH:N, NR (R = H, Aromatic hydrocarbon or aromatic heterocycle); CPA and CPB are specified coupler residues].
IT 157270-63-8
RL: USES (Uses)
(electrophotog. charge-generating compound)
RN 157270-63-8 CAPLUS
CN 2-Naphthalenecarboxamide, 4-[[4-[5-[4-[[3-[[(4-cyano-1-hydroxy-3-methylpyrido[1,2-a]benzimidazol-2-yl)amino]carbonyl]-2-hydroxy-1-naphthalenyl]azo]phenyl]-2-thienyl]phenyl]azo]-3-hydroxy-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 169 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



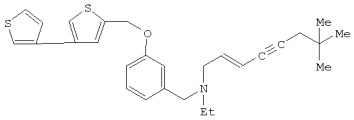
PAGE 2-A



L19 ANSWER 170 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:435005 CAPLUS
DOCUMENT NUMBER: 121:35005
TITLE: Substituted alkylamine derivatives
INVENTOR(S): Takezawa, Hiroshi; Hayashi, Masahiro; Iwasawa, Yoshikazu; Hosoi, Masaaki; Iida, Yoshiaki; Tsuchiya, Yoshimi; Horie, Masahiro; Kamei, Toshio
PATENT ASSIGNEE(S): Banyu Pharmaceutical Co., Ltd., Japan
SOURCE: U.S., 74 pp. Cont.-in-part of U.S. Ser. No. 533,532, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 5234946 | A | 19930810 | US 1991-753611 | 19910830 |
| ZA 8808792 | A | 19890830 | ZA 1988-8792 | 19881124 |
| JP 03193746 | A | 19910823 | JP 1988-296840 | 19881124 |
| CN 1037141 | A | 19891115 | CN 1988-109274 | 19881126 |
| ZA 8908464 | A | 19910130 | ZA 1989-8464 | 19891107 |
| PRIORITY APPLN. INFO.: | | | JP 1987-299584 A | 19871127 |
| | | | JP 1988-96286 A | 19880419 |
| | | | JP 1988-113310 A | 19880510 |
| | | | JP 1988-285381 A | 19881111 |
| | | | US 1988-274972 B2 | 19881122 |
| | | | US 1990-465209 B2 | 19900308 |
| | | | US 1990-533532 B2 | 19900605 |

OTHER SOURCE(S): MARPAT 121:35005
GI

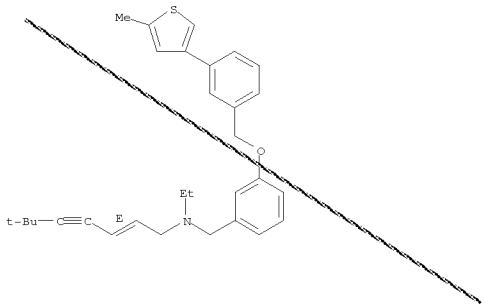


I

AB The title compds. and their uses for the treatment of hypercholesteremia, arteriosclerosis and and hyperlipemia are claimed. Specifically claimed is compound I. The title compds. are squalane epoxidase inhibitors.
IT 155294-56-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antiarteriosclerotic, anticholesteremic or hypolipemic)

L19 ANSWER 170 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 155294-56-7 CAPLUS
CN Benzenemethanamine, N-(6,6-dimethyl-2-hepten-4-ynyl)-N-ethyl-3-[[3-(5-methyl-3-thienyl)phenyl]methoxy]-, (E)- (9CI) (CA INDEX NAME)

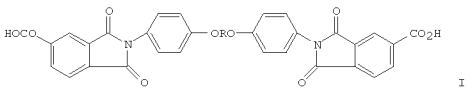
Double bond geometry as shown.



L19 ANSWER 171 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:324460 CAPLUS
DOCUMENT NUMBER: 120:324460
TITLE: Diimide dicarboxylic acids and their polyamides
INVENTOR(S): Yang, Chin Ping; Hsiao, Sheng Huei; Lin, Jiun Hung
PATENT ASSIGNEE(S): National Science Council, Taiwan
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 5268487 | A | 19931207 | US 1993-44237 | 19930407 |
| US 5414070 | A | 19950509 | US 1993-162683 | 19931203 |
| PRIORITY APPLN. INFO.: | | | US 1993-44237 | A3 19930407 |

OTHER SOURCE(S): MARPAT 120:324460
GI

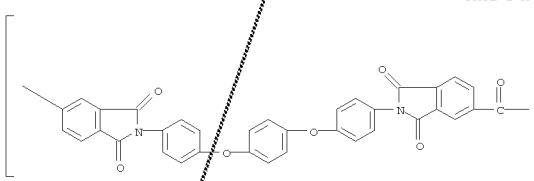


I

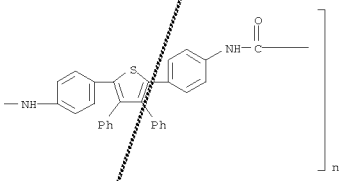
AB Title acids I (R = arylene), useful for manufacture of polyamide-polyether-
polyimides with improved strength, heat resistance and processability, are
prepared by condensing the appropriate aromatic diamines with trimellitic anhydride (II) in a polar solvent. Thus, reaction of 1,4-bis(4-aminophenoxy)benzene with II in DMF gave I (R = 1,4-phenylene), which was polymerized with 2,2-bis[4-(4-aminophenoxy)phenyl] sulfone to give a polymer
with tensile strength 62 MPa and 10% weight loss temperature 525 and 521° in
air and N, resp.
IT 143780-00-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of heat-resistant)
RN 143780-00-1 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

L19 ANSWER 171 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

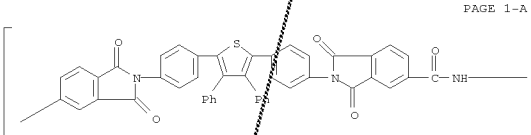


PAGE 1-B



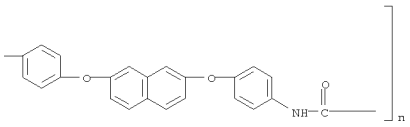
L19 ANSWER 172 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:299417 CAPLUS
DOCUMENT NUMBER: 120:299417
TITLE: New poly(amide-imide) synthesis. IX. Preparation and properties of poly(amide-imide)s derived from 2,7-bis(4-aminophenoxy)naphthalene and various bis(trimellitimide)s
AUTHOR(S): Yang, Chin Ping; Chen, Wen Tung
CORPORATE SOURCE: Dep. Chem. Eng., Tatung Inst. Technol., Taipei, Taiwan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry
(1994), 32(6), 1101-11
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Eleven bis(phenoxy)naphthalene-containing poly(amide-imides) were synthesized
by the direct polycondensation of 2,7-bis(4-aminophenoxy)naphthalene (DAPON) with various aromatic bis(trimellitimides) in N-methyl-2-pyrrolidone
(I) using tri-Ph phosphite and pyridine as condensing agents. Poly(amide-imides) having inherent viscosities of 0.70-1.12 dL/g were obtained in quant. yields. The polymers containing p-phenylene of bis(phenoxy)benzene units exhibited crystalline x-ray diffraction patterns.
Most of the polymers were readily soluble in various solvents such as I, N,N-dimethylacetamide (II), DMSO, m-cresol, o-chlorophenol, and pyridine, and gave transparent and flexible films cast from II solns. Cast films showed obvious yield points in the stress-strain curves and had strength at break up to 87 MPa, alongation to break up to 11%, and initial modulus up to 2.10 GPa. These poly(amide-imides) had glass transition temps. in the range of 255-321°, and the 10% weight loss temps. were recorded in the range of 529-586° in nitrogen. The properties of poly(amide-imides) were compared with those of the corresponding isomeric poly(amide-imides) prepared from 2,7-bis(4-trimellitmidophenoxy)naphthalene and aromatic diamines.
IT 154929-77-8P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of)
RN 154929-77-8 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenyleneoxy-2,7-naphthalenediyloxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



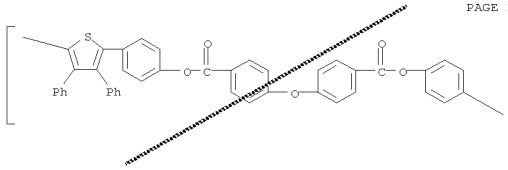
L19 ANSWER 172 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



L19 ANSWER 173 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:245918 CAPLUS
DOCUMENT NUMBER: 120:245918
TITLE: Synthesis and characterization of novel polyarylates from 2,5-bis(4-hydroxyphenyl)-3,4-diphenylthiophene and various aromatic dicarboxylic acids
AUTHOR(S): Jeong, Hwa Jin; Iwasaki, Ken; Kakimoto, Masaaki; Imai, Yoshio
CORPORATE SOURCE: Dep. Org. Polym. Mater., Tokyo Inst. Technol., Tokyo, 152, Japan
SOURCE: Polymer Journal (Tokyo, Japan) (1994), 26(3), 379-85
CODEN: POLJB8; ISSN: 0032-3896
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new tetraphenylated heterocyclic diol, 2,5-bis(4-hydroxyphenyl)-3,4-diphenylthiophene, was synthesized in three steps starting from 4-methoxydeoxybenzoin. The tetraphenylthiophene-containing polyarylates having inherent viscosities of 0.29-0.84 dL g-1 were prepared by the high temperature solution polycondensation of the diol with various aromatic dicarboxylic acid chlorides. All the polyarylates were crystalline or semicryst., and the crystalline polyarylates were quite insol. in organic solvents, while the others dissolved readily in a variety of solvents including N-methyl-2-pyrrolidone and sym-tetrachloroethane. These polymers had glass transition temps. in the range of 209-260°C, with no weight loss below 400°C in both air and nitrogen atmospheres.
IT 154584-60-8P, 2,5-Bis(4-hydroxyphenyl)-3,4-diphenylthiophene-4,4'-oxydibenzoyl chloride copolymer, SRU
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
RN 154584-60-8 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneoxycarbonyl-1,4-phenyleneoxy-1,4-phenylenecarbonyloxy-1,4-phenylene] (9CI) (CA INDEX NAME)

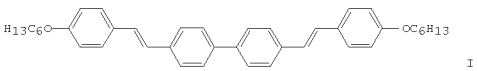
PAGE 1-A



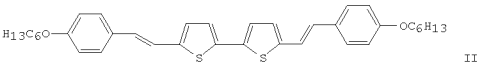
L19 ANSWER 173 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

L19 ANSWER 174 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:244491 CAPLUS
DOCUMENT NUMBER: 120:244491
TITLE: The synthesis of novel arylene-vinylene oligomers
AUTHOR(S): Maud, J. M.; Thompson, N. J.; Hepburn, A. R.; Marshall, J. M.
CORPORATE SOURCE: Dep. Chem., Univ. Coll. Swansea, Singleton Park/Swansea, SA2 8PP, UK
SOURCE: Synthetic Metals (1993), 57(2-3), 4777-82
CODEN: SYMEDZ; ISSN: 0379-6779
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

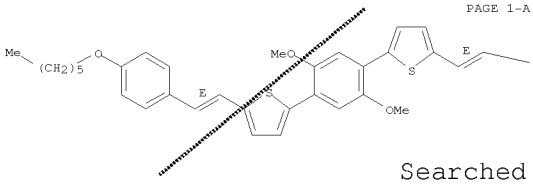


II

AB The preparation of mixed arylene-vinylene oligomers with alkyl or alkoxy substituents situated on the 2 terminal aromatic units is described. Although the oligomers do not display the expected solubility in organic solvents, the success of the synthetic strategy in providing a wide range of materials, designed for the construction of oligomer structure - electronic property relations, is demonstrated. Coupling of (E)-1-(4-bromophenyl)-2-[4-(hexyloxy)phenyl]ethene gave the dimer I. Coupling of (E)-1-(4-bromophenyl)-2-(5-bromo-2-thienyl)ethene gave the dimer II.
IT 154368-63-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 154368-63-5 CAPLUS
CN Thiophene, 2,2'-(2,5-dimethoxy-1,4-phenylene)bis[5-[2-[4-(hexyloxy)phenyl]ethenyl]-, (E,E)- (9CI) (CA INDEX NAME)

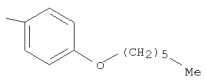
Double bond geometry as shown.

PAGE 1-A



L19 ANSWER 174 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

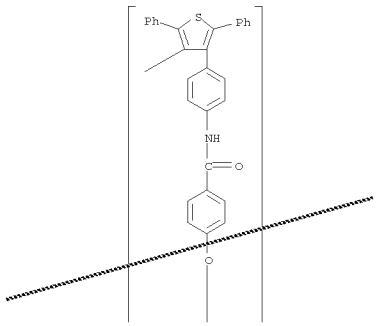
PAGE 1-B



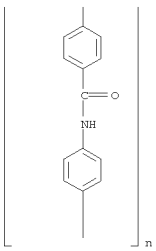
L19 ANSWER 175 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:107926 CAPLUS
DOCUMENT NUMBER: 120:107926
TITLE: Synthesis and characterization of novel aromatic polyamides from 3,4-bis(4-aminophenyl)-2,5-diphenylthiophene and aromatic dicarboxylic acids
AUTHOR(S): Jeong, HwaJin; Kobayashi, Atsushi; Kakimoto, Masaaki; Imai, Yoshio
CORPORATE SOURCE: Dep. Organ. Polym. Mater., Tokyo Inst. Technol., Tokyo, 152, Japan
SOURCE: Polymer Journal (Tokyo, Japan) (1994), 26(1), 99-103
CODEN: POLJB8; ISSN: 0032-3896
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A new highly phenylated diamine, 3,4-bis(4-aminophenyl)-2,5-diphenylthiophene, was synthesized in 3 steps starting from 4'-nitrodeoxybenzoin. New aromatic polyamides containing the tetraphenylthiophene unit were prepared by low-temperature solution polycondensation of this diamine with various aromatic dicarboxylic acid chlorides. These polyamides had inherent viscosities of 0.20-0.35 dL-g-1 and were generally soluble in various organic solvents such as AcNMe2, N-methyl-2-pyrrolidone, and DMSO. The glass transition temps. of the polyamides were 285-327°, and the 10% weight loss temps. were >530° in N.
IT 152834-78-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and solubility and thermal properties of)
RN 152834-78-1 CAPLUS
CN Poly[(2,5-diphenyl-3,4-thiophenediyl)-1,4-phenyleneiminocarbonyl-1,4-phenyleneoxy-1,4-phenylenecarbonylimino-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 175 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



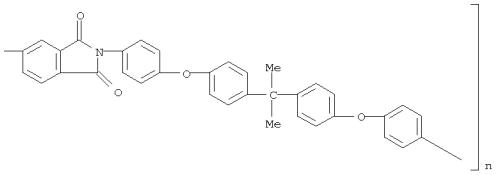
PAGE 2-A



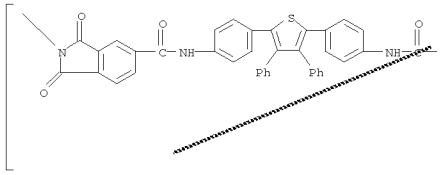
L19 ANSWER 176 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:55168 CAPLUS
DOCUMENT NUMBER: 120:55168
TITLE: New poly(amide imide) syntheses. V. Preparation and properties of poly(amide imides) based on the diimide-diacid condensed from 2,2-bis[4-(4-aminophenoxy)phenyl]propane and trimellitic anhydride
AUTHOR(S): Yang, Chin Ping; Hsiao, Sheng Huei; Lin, Jiun Hung
CORPORATE SOURCE: Dep. Chem. Eng., Tatung Inst. Technol., Taipei, Taiwan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry
(1993), 31(12), 2995-3002
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A dicarboxylic acid (I) bearing two pre-formed imide rings was prepared by the condensation of 2,2-bis[4-(4-aminophenoxy)phenyl]propane and trimellitic anhydride. A new family of poly(amide-imide)s having inherent viscosities 0.53-1.68 dL/g was prepared by P(OPh)3-activated polycondensation of I with various aromatic diamines in a medium consisting of N-methyl-2-pyrrolidone (NMP), pyridine, and CaCl2. Most of the resulting polymers showed an amorphous nature and were readily soluble in polar solvents such as NMP and AcNMe2. All the soluble poly(amide-imide)s afforded transparent, flexible, tough films. The glass transition temps. of these poly(amide-imide)s were in the range 237-293°, and the 10% weight loss temps. were >508° in N.
IT 152109-00-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and properties of films of)
RN 152109-00-7 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 176 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



PAGE 1-A



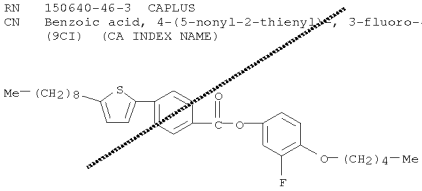
L19 ANSWER 177 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:614339 CAPLUS
DOCUMENT NUMBER: 119:214339
TITLE: A study of homologation and the occurrence of an SA-SC-SA sequence of phases in the 4-alkoxy-3-fluorophenyl 4-(5-alkyl-2-thienyl)benzoates
AUTHOR(S): Byron, D. J.; Matharu, A. S.; Shirazi, S. N. R.; Tajbakhsh, A. R.; Wilson, R. C.
CORPORATE SOURCE: Dep. Chem. Phys., Nottingham Trent Univ., Nottingham, NG11 8NS, UK
SOURCE: Liquid Crystals (1993), 14(3), 645-52
CODEN: LICRE6; ISSN: 0267-8292
DOCUMENT TYPE: Journal
LANGUAGE: English

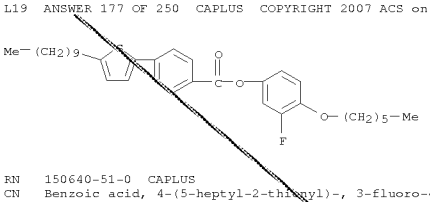
AB Seventeen esters, derived from 4-alkoxy-3-fluorophenols and 4-(5-alkyl-2-thienyl)benzoic acids, were prepared and their liquid crystal transition temps. determined by thermal optical microscopy. On cooling the isotropic liquid, the SA-SC-SA sequence of phases reported for the octyloxy-octyl and octyloxy-nonyl esters was observed for certain other homologs, principally members of the 4-(5-nonyl-2-thienyl)benzoates. For these compds., the temperature range of occurrence of the intermediate SC phase decreases as the length of the alkoxy chain increases (for the hexyloxy-nonyl to dodecyloxy-nonyl esters) and the SC phase is absent for the tetradecyloxy-nonyl homolog.

IT 150640-46-3P 150640-47-4P 150640-48-5P
150640-49-6P 150640-50-9P 150640-51-0P
150640-52-1P 150640-53-2P 150640-54-3P
150640-55-4P 150640-56-5P 150640-57-6P
150640-58-7P 150640-59-8P 150640-60-1P
150640-61-2P 150640-62-3P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liquid crystal, preparation and properties of)

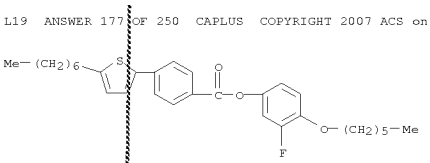
RN 150640-46-3 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(pentyloxy)phenyl ester (9CI) (CA INDEX NAME)



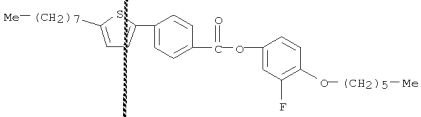
RN 150640-47-4 CAPLUS
CN Benzoic acid, 4-(5-heptyl-2-thienyl)-, 3-fluoro-4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)



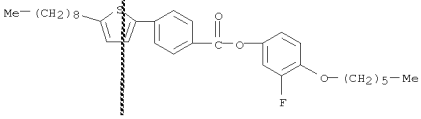
RN 150640-48-5 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 3-fluoro-4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 150640-49-6 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)



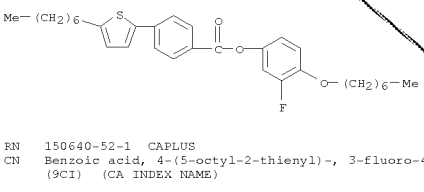
RN 150640-50-9 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 3-fluoro-4-(hexyloxy)phenyl ester (9CI) (CA INDEX NAME)



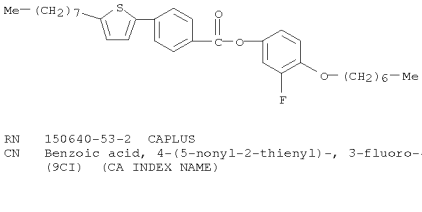
RN 150640-51-0 CAPLUS
CN Benzoic acid, 4-(5-heptyl-2-thienyl)-, 3-fluoro-4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)



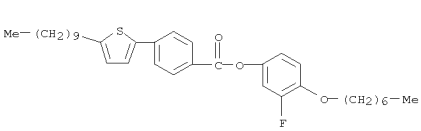
RN 150640-52-1 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 3-fluoro-4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)



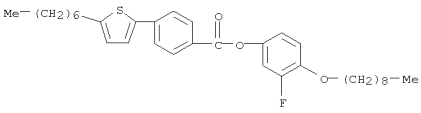
RN 150640-53-2 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)



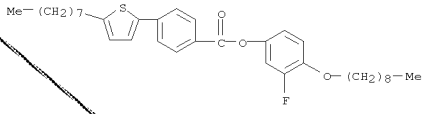
RN 150640-54-3 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 3-fluoro-4-(heptyloxy)phenyl ester (9CI) (CA INDEX NAME)



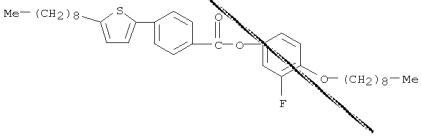
RN 150640-55-4 CAPLUS
CN Benzoic acid, 4-(5-heptyl-2-thienyl)-, 3-fluoro-4-(nonyloxy)phenyl ester (9CI) (CA INDEX NAME)



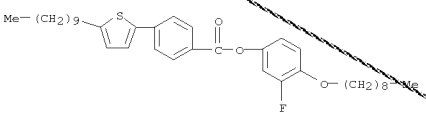
RN 150640-56-5 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 3-fluoro-4-(nonyloxy)phenyl ester (9CI) (CA INDEX NAME)



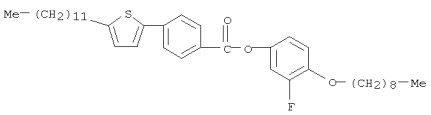
RN 150640-57-6 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(nonyloxy)phenyl ester (9CI) (CA INDEX NAME)



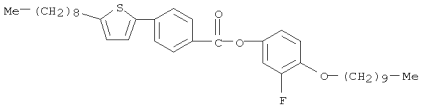
L19 ANSWER 177 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 150640-58-7 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 3-fluoro-4-(nonyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 150640-59-8 CAPLUS
CN Benzoic acid, 4-(5-dodecyl-2-thienyl)-, 3-fluoro-4-(nonyloxy)phenyl ester (9CI) (CA INDEX NAME)

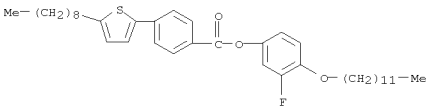


RN 150640-60-1 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 4-(decyloxy)-3-fluorophenyl ester (9CI) (CA INDEX NAME)

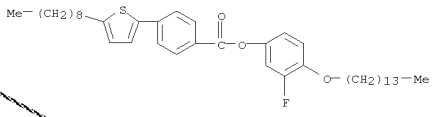


RN 150640-61-2 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 4-(dodecyloxy)-3-fluorophenyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 177 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 150640-62-3 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(tetradecyloxy)phenyl ester (9CI) (CA INDEX NAME)



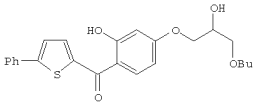
L19 ANSWER 178 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1993:212876 CAPLUS
DOCUMENT NUMBER: 118:212876
TITLE: alkoxy-2-hydroxyphenyl 5-phenyl-2-thienyl ketones and their use as UV absorbers in photographic materials
INVENTOR(S): Leppard, David G.; Burdeska, Kurt
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 521823 | A1 | 19930107 | EP 1992-810481 | 19920624 |
| EP 521823 | B1 | 19960117 | | |
| R: BE, DE, FR, GB, IT, NL | | | | |
| US 5290952 | A | 19940301 | US 1992-906607 | 19920630 |
| JP 05194483 | A | 19930803 | JP 1992-200323 | 19920703 |
| JP 3223386 | B2 | 20011029 | | |

PRIORITY APPLN. INFO.: CH 1991-1963 A 19910703

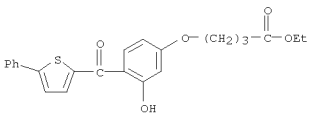
OTHER SOURCE(S): CASREACT 118:212876; MARPAT 118:212876
GI



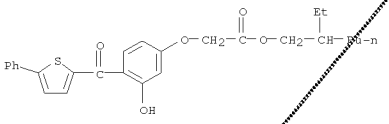
I

AB Some 4-alkoxy-2-hydroxyphenyl 5-phenyl-2-thienyl ketones are claimed. A process for the preparation of said compds. is claimed which comprises the alkylation of 2,4-dihydroxyphenyl 5-phenyl-2-thienyl ketone with an alkyl halide or an epoxy compound These compds. are UV absorbers for photog. materials. Photog. materials containing a transparent carrier, a layer consisting of said 2,4-dihydroxyphenyl 5-phenyl-2-thienyl ketone derivs. and layers of a silver halide emulsion are claimed. Treatment of 2,4-dihydroxyphenyl 5-phenyl-2-thienyl ketone with Bu glycidyl ether gave 4-(3-butoxy-2-hydroxypropoxy)-2-hydroxyphenyl 5-phenyl-2-thienyl ketone (I) in 73% yield.
IT 146950-92-7P 146950-93-8P 146950-94-9P
146950-95-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 146950-92-7 CAPLUS
CN Butanoic acid, 4-[3-hydroxy-4-[(5-phenyl-2-thienyl)carbonyl]phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)

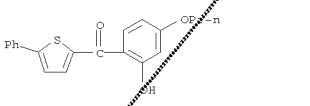
L19 ANSWER 178 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



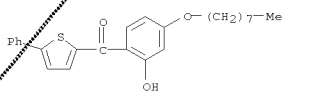
RN 146950-93-8 CAPLUS
CN Acetic acid, [3-hydroxy-4-[(5-phenyl-2-thienyl)carbonyl]phenoxy]-, 2-ethylhexyl ester (9CI) (CA INDEX NAME)



RN 146950-94-9 CAPLUS
CN Methanone, (2-hydroxy-4-pentoxyphenyl)(5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)

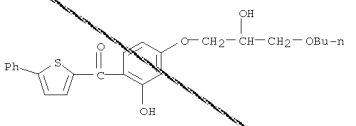


RN 146950-95-0 CAPLUS
CN Methanone, [2-hydroxy-4-(octyloxy)phenyl](5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)

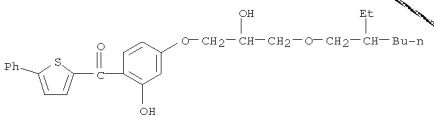


IT 146950-87-0P 146950-88-1P 146950-89-2P
146950-90-5P 146950-91-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as UV absorber for photog. materials)
RN 146950-87-0 CAPLUS
CN Methanone, [4-(3-butoxy-2-hydroxypropoxy)-2-hydroxyphenyl](5-phenyl-2-

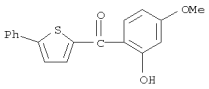
L19 ANSWER 178 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thienyl)- (9CI) (CA INDEX NAME)



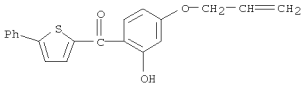
RN 146950-88-1 CAPLUS
CN Methanone, [4-[3-[(2-ethylhexyl)oxy]-2-hydroxypropoxy]-2-hydroxyphenyl](5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)



RN 146950-89-2 CAPLUS
CN Methanone, (2-hydroxy-4-methoxyphenyl)(5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)

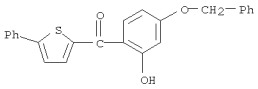


RN 146950-90-5 CAPLUS
CN Methanone, [2-hydroxy-4-(2-propenyloxy)phenyl](5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)



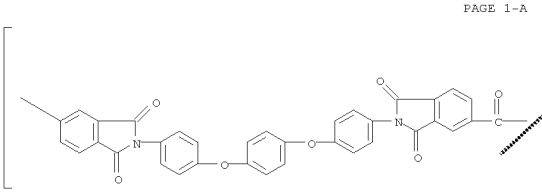
L19 ANSWER 178 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 146950-91-6 CAPLUS
CN Methanone, [2-hydroxy-4-(phenylmethoxy)phenyl](5-phenyl-2-thienyl)- (9CI) (CA INDEX NAME)



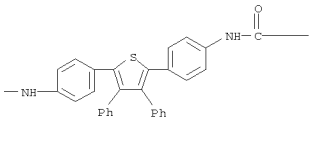
L19 ANSWER 179 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:572224 CAPLUS
DOCUMENT NUMBER: 117:172224
TITLE: New poly(amide imide) syntheses. 4. Poly(amide imides) derived from 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene and various bis(trimellitimides)
AUTHOR(S): Yang, Chin Ping; Hsiao, Sheng Huei; Lin, Jiun Hung
CORPORATE SOURCE: Dep. Chem. Eng., Tatung Inst. Technol., Taipei, Taiwan
SOURCE: Makromolekulare Chemie (1992), 193(6), 1299-308
CODEN: MACEAK; ISSN: 0025-116X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fifteen bis(trimellitimides) are prepared by condensation of the corresponding aliphatic or aromatic diamines with trimellitic anhydride. A series of structurally new poly(amide-imides) are synthesized by the direct polycondensation of these bis(trimellitimides) with 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene using tri-Ph phosphite and pyridine as condensing agents in N-methyl-2-pyrrolidone (I). The resultant poly(amide-imides) have inherent viscosities 0.72-2.73 dL/g at 30° in N,N-dimethylacetamide (II). The polymers are amorphous and readily soluble in polar aprotic solvents such as II and I. Transparent and tough films can be cast from their solns. Most aliphatic-aromatic poly(amide-imides) show a glass transition in 203-242° in their DSC traces, whereas the wholly aromatic poly(amide-imides) show no discernible transition before decomposition The thermal stability of the polymers is evaluated by thermogravimetry which shows the 10% weight-loss temps. at 414-459° in air and at 451-578° in a N atmospheric for the aliphatic-aromatic poly(amide-imides), and >500° in both air and N atmospheric for the wholly aromatic poly(amide-imides).
IT 143780-00-1P 143780-01-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation and properties of)
RN 143780-00-1 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



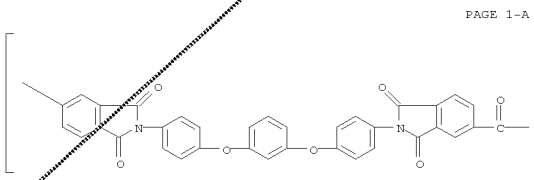
L19 ANSWER 179 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

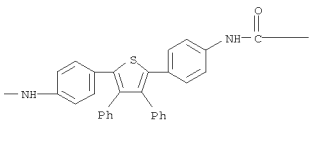


RN 143780-01-2 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenyleneoxy-1,3-phenyleneoxy-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



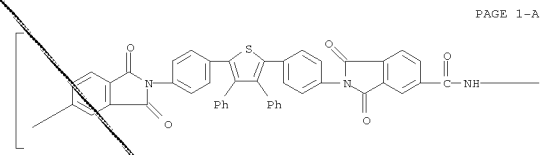
PAGE 1-B



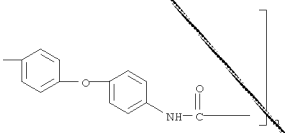
L19 ANSWER 180 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:512535 CAPLUS
DOCUMENT NUMBER: 117:112535
TITLE: New poly(amide imides) syntheses. I. Soluble high-temperature poly(amide imides) derived from 2,5-bis(4-trimellitimidophenyl)-3,4-diphenylthiophene and various aromatic diamines
AUTHOR(S): Yang, Chin Ping; Yen, Yung Yu
CORPORATE SOURCE: Dep. Chem. Eng., Tatung Inst. Technol., Taipei, Taiwan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry
(1992), 30(9), 1855-64
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Novel aromatic poly(amide-imides) with high inherent viscosities were prepared by direct polycondensation of 2,5-bis(4-trimellitimidophenyl)-3,4-diphenylthiophene (I) and aromatic diamines using tri-Ph phosphite in the N-methyl-2-pyrrolidone/pyridine solution containing dissolved CaCl2. I was readily obtained by the condensation reaction of 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene with trimellitic anhydride. The obtained poly(amide-imides) showed high thermostability. Their decomposition temps. at 10% weight loss in N were >550° and the anaerobic char yield at 800° was 48-68%. Almost all the poly(amide-imides) showed high glass transition temps. (>300°) by DSC measurements. These polymers were readily soluble in various organic solvents and could be cast into transparent, tough, and flexible films. Their casting films showed obvious yield points in the stress-strain curves and had strength at break ≤74.2 MPa, elongation to break ≤70.1%, and initial modulus ≤4.56 GPa. The factors affecting the reaction of I and 4,4'-oxygianiline in view of monomer concentration, reaction temperature, and amount of CaCl2 were also investigated.
IT 142956-33-0P 142956-39-6P 142987-71-1P
RL: PEP (Physical, engineering or chemical process); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)
(preparation and properties of)
RN 142956-33-0 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

L19 ANSWER 180 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

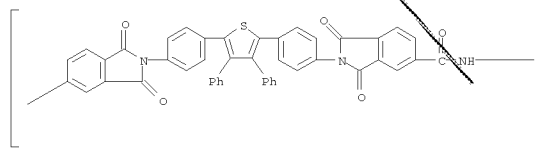


PAGE 1-B



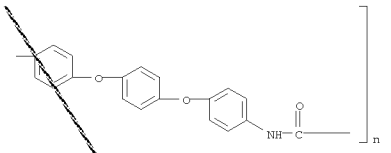
RN 142956-39-6 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenyleneoxy-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



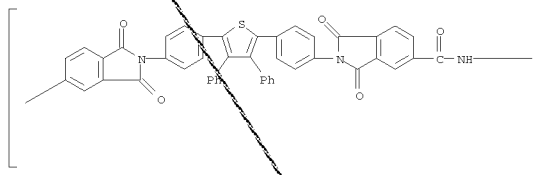
L19 ANSWER 180 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

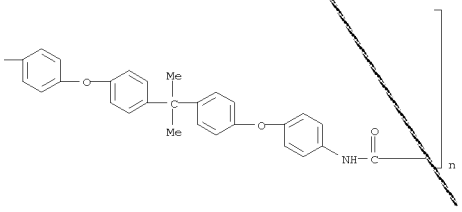


RN 142987-71-1 CAPLUS
CN Poly[(1,3-dihydro-1,3-dioxo-2H-isoindole-5,2-diyl)-1,4-phenylene(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(1,3-dihydro-1,3-dioxo-2H-isoindole-2,5-diyl)carbonylimino-1,4-phenyleneoxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl] (9CI) (CA INDEX NAME)

PAGE 1-A



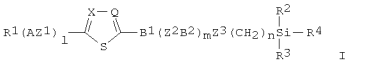
PAGE 1-B



L19 ANSWER 181 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:417462 CAPLUS
DOCUMENT NUMBER: 117:17462
TITLE: Mesomorphic compounds and liquid-crystal compositions and devices and display apparatus and method using them
INVENTOR(S): Iwaki, Takashi; Takiguchi, Takao; Togano, Takeshio; Yamada, Yoko; Nakamura, Shinichi
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Eur. Pat. Appl., 113 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 476567 | A1 | 19920325 | EP 1991-115683 | 19910916 |
| EP 476567 | B1 | 19960612 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 04124190 | A | 19920424 | JP 1990-243712 | 19900917 |
| US 5217645 | A | 19930608 | US 1991-759442 | 19910913 |
| AT 139235 | T | 19960615 | AT 1991-115683 | 19910916 |
| PRIORITY APPLN. INFO.: | | | JP 1990-243712 A | 19900917 |

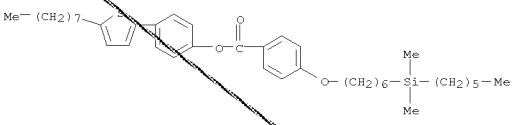
OTHER SOURCE(S): MARPAT 117:17462
GI



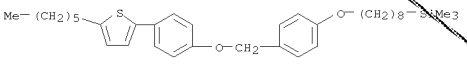
I

AB The compds. have the general formula I, where R1 = C2-16 alkyl in which 1 or 2 nonadjacent CH2 groups may be replaced by O, S, CO, COO, or OCO and a H may be replaced by F; A = A1 or A1A2; B2 = B3 or B3B4; A1,A2,B1,B3,B4 = 1,4-phenylene (optionally substituted with 1 or 2 F, Cl, Br, Me, CN, and/or CF3), 1,4-cyclohexylene, 5,2- or 2,5-pyrimidinylene, or 5,2- or 2,5-pyridinylene, and B1 may also be a single bond; Z1,Z2 = single bond, COO, OCO, CH2O, or OCH2; Z3 = O, CO, COO, or OCO; R2,R3,R4 = C1-16 alkyl in which 1 or 2 CH2 groups may be replaced by O, COO, or OCO; l,m = 0 or 1; l + m ≠ 0; n = 1-12; and X,Q = CH or N but are not N simultaneously.
IT 142051-31-8 142051-32-9 142051-34-1
142051-35-2 142051-36-3
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid-crystal compns. containing, for display devices)
RN 142051-31-8 CAPLUS
CN Benzoic acid, 4-[[6-(hexyldimethylsilyl)hexyl]oxy]-, 4-(5-octyl-2-thienyl)phenyl ester (9CI) (CA INDEX NAME)

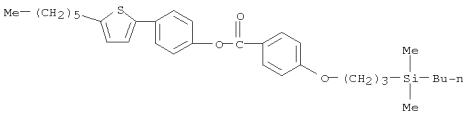
L19 ANSWER 181 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



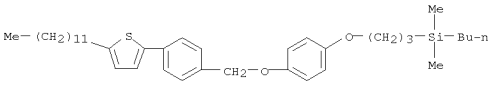
RN 142051-32-9 CAPLUS
CN Silane,
[8-[4-[[4-(5-hexyl-2-thienyl)phenoxy]methyl]phenoxy]octyl]trimethyl- (9CI) (CA INDEX NAME)



RN 142051-34-1 CAPLUS
CN Benzoic acid, 4-[3-(butyldimethylsilyl)propoxy]-, 4-(5-hexyl-2-thienyl)phenyl ester (9CI) (CA INDEX NAME)

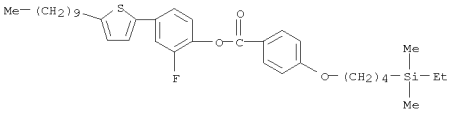


RN 142051-35-2 CAPLUS
CN Silane,
butyl[3-[4-[[4-(5-dodecyl-2-thienyl)phenyl]methoxy]phenoxy]propyl]dimethyl- (9CI) (CA INDEX NAME)



RN 142051-36-3 CAPLUS
CN Benzoic acid, 4-[4-(ethyldimethylsilyl)butoxy]-, 4-(5-decyl-2-thienyl)-2-

L19 ANSWER 181 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
fluorophenyl ester (9CI) (CA INDEX NAME)

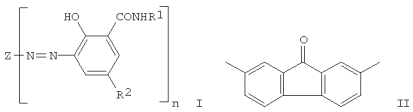


L19 ANSWER 182 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:265598 CAPLUS
DOCUMENT NUMBER: 116:265598
TITLE: Electrophotographic photoreceptor containing azo charge-generating agent
INVENTOR(S): Yamada, Yasuyuki; Enomoto, Tsuyoshi; Ito, Naoto; Yamaguchi, Teruhiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 04020971 | A | 19920124 | JP 1990-124094 | 19900516 |
| JP 2895162 | B2 | 19990524 | | |
| PRIORITY APPLN. INFO.: | | | JP 1990-124094 | 19900516 |

OTHER SOURCE(S): MARPAT 116:265598
GI



I

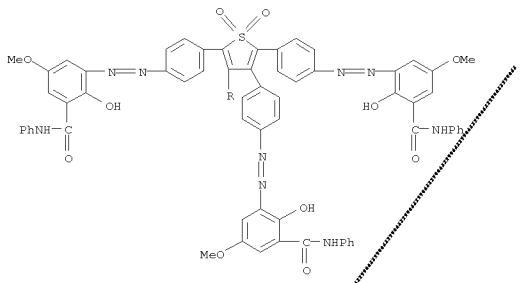


II

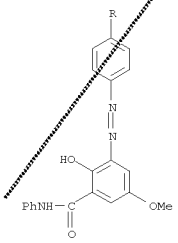
AB The title photoreceptor consists of an elec. conductive substrate coated with a photosensitive layer containing ≥1 azo compound I [Z, R1 = (substituted) aromatic hydrocarbon group, aromatic heterocyclic group; R2 = alkyl, alkoxy; n = 2-4]. A photoreceptor having a charge-generating layer containing I (Z = II, R1 = o-ClC6H4; R2 = OMe; n = 2) showed high photosensitivity and durability during repeating use.
IT 141624-30-8 141624-33-1
RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. charge-generating agent)
RN 141624-30-8 CAPLUS
CN Benzamide, 3,3',3'',3'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-5-methoxy-N-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 182 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



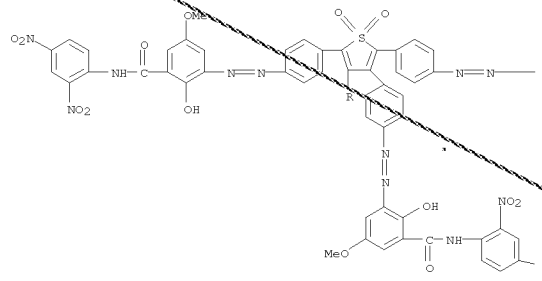
PAGE 2-A



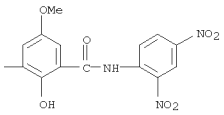
RN 141624-33-1 CAPLUS
CN Benzamide, 3,3',3'',3'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[N-(2,4-dinitrophenyl)-2-hydroxy-5-methoxy- (9CI) (CA INDEX NAME)

L19 ANSWER 182 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

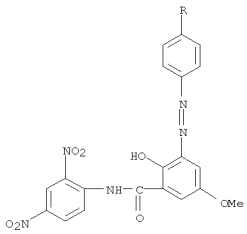


PAGE 1-B



L19 ANSWER 182 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



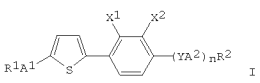
L19 ANSWER 183 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1992:224885 CAPLUS
DOCUMENT NUMBER: 116:224885
TITLE: Mesomorphic compounds and liquid-crystal compositions and devices containing them
INVENTOR(S): Yamada, Yoko; Takiguchi, Takao; Iwaki, Takashi; Togano, Takeshi; Nakamura, Shinichi
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Eur. Pat. Appl., 133 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 467260 | A2 | 19920122 | EP 1991-111755 | 19910715 |
| EP 467260 | A3 | 19920527 | | |
| EP 467260 | B1 | 19961016 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE | | | | |
| JP 04217973 | A | 19920807 | JP 1990-326454 | 19901127 |
| US 5244595 | A | 19930914 | US 1991-729740 | 19910715 |
| AT 144277 | T | 19961115 | AT 1991-111755 | 19910715 |

PRIORITY APPLN. INFO.: JP 1990-188490 A 19900716
JP 1990-326454 A 19901127

OTHER SOURCE(S): MARPAT 116:224885
GI



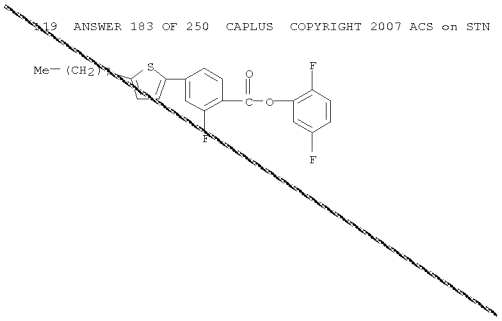
I

AB The compds. have the general formula I, where R1,R2 = C1-18 alkyl in which CH2 may be replaced by CO, O, CHF, CHCF3, CHCl, CHCN, or C(Me)(CN) and R2 may also be H, halogen, CN, or CF3; n = 0 or 1; A1 = single bond, 1,4-phenylene, 3-fluoro-, or 2-fluoro-1,4-phenylene; A2 = 1,4-phenylene or 1,4-cyclohexylene substituted with Z1 and Z2, 2,5- or 5,2-pyridinylene, or thiophen-2,5-ylene; X1,X2,Z1,Z2 = H, halogen, CN, or CF3; and Y = COO, OCO, CH2O, OCH2, or single bond.

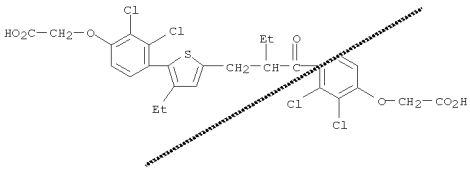
IT 141113-21-5
RL: TEM (Technical or engineered material use); USES (Uses)
(liquid-crystal compns. containing, for display devices)

RN 141113-21-5 CAPLUS
CN Benzoic acid, 2-fluoro-4-(5-octyl-2-thienyl)-, 2,5-difluorophenyl ester (9CI) (CA INDEX NAME)

L19 ANSWER 183 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



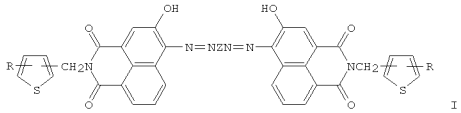
L19 ANSWER 184 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:194074 CAPLUS
DOCUMENT NUMBER: 116:194074
TITLE: Furans and thiophenes from etacrynic acid
AUTHOR(S): Goerlitzer, Klaus; Boemeke, Michael
CORPORATE SOURCE: Inst. Pharm. Chem., Tech. Univ. Braunschweig, Braunschweig, 3300, Germany
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1992), 325(1), 9-12
CODEN: ARPMAS; ISSN: 0365-6233
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 116:194074
GI For diagram(s), see printed CA Issue.
AB R1COCH2CHEtCOR [I, R = C6H2(OCH2CO2H)Cl2-4,2,3, R1 = H, Me, RCOCHEtCH2] react with polyphosphoric acid (PPA) to yield the furans II (X = O) and with P2S5 to the thiophenes II (X = S). I (R1 = OH) cyclizes with PPA to form the α,β-unsatd. butyrolactone. I (R1 = OH) is reduced by NaBH4 chemo- and diastereoselectively to give the γ-hydroxy carboxylic acid (3RS, 4RS)-HOCHRCHEtCH2CO2H which is cyclized to III by dehydration with PPA. II (X = SO2) are obtained from II (X = S) by oxidation with magnesium monoperoxyphthalate. Under the same conditions II (X = O, R1 = Me) is cleaved to yield (Z)-MeCOCH:CEtCOR, which tautomerizes slowly forming (E)-MeCOCH2C(COR):CHMe.
IT 139519-99-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 139519-99-6 CAPLUS
CN Acetic acid, [4-[5-[2-[4-(carboxymethoxy)-2,3-dichlorobenzoyl]butyl]-3-ethyl-2-thienyl]-2,3-dichlorophenoxy]- (9CI) (CA INDEX NAME)



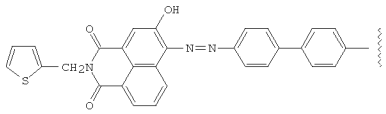
L19 ANSWER 185 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:162533 CAPLUS
DOCUMENT NUMBER: 116:162533
TITLE: Electrophotographic photoreceptors using novel bisazo charge-generating agent
INVENTOR(S): Amano, Masayo; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

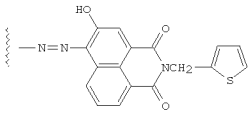
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 03255455 | A | 19911114 | JP 1990-282465 | 19901019 |
| JP 2833192 | B2 | 19981209 | | |
| PRIORITY APPLN. INFO.: | | | JP 1990-8027 | A1 19900117 |

GI



I



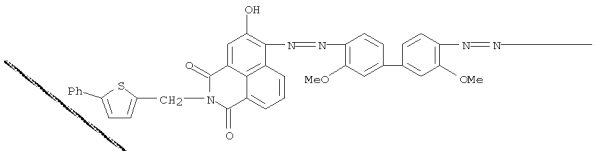


II

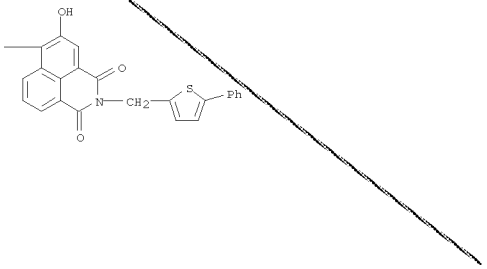
AB The photoreceptors comprise a photosensitive layer containing ≥1 bisazo

L19 ANSWER 185 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
compd. I [R = H, halo, (substituted) alkyl or aryl; Z = (substituted) arom. hydrocarbon, condensed polycyclic or heterocyclic ring]. The photoreceptors show good photosensitivity, durability, and provide high quality images. Thus, an Al vapor-deposited polyester film was coated with a compn. contg. II and 1-phenyl-3-(p-diethylaminostyryl)-5-(p-diethylaminophenyl)-2-pyrazoline to give a photoreceptor.
IT 140131-14-2
RL: USES (Uses)
(charge-generating agent, electrophotog. photoreceptor using)
RN 140131-14-2 CAPLUS
CN 1H-Benz[de]isoquinoline-1,3(2H)-dione, 6,6'-[(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-hydroxy-2-[(5-phenyl-2-thienyl)methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



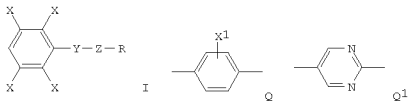
PAGE 1-B



L19 ANSWER 186 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:619697 CAPLUS
DOCUMENT NUMBER: 115:219697
TITLE: Preparation of liquid crystal compositions
INVENTOR(S): Mori, Yoshimasa; Takiguchi, Takao; Iwaki, Takashi; Tokano, Goji; Yamada, Yoko
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 02255635 | A | 19901016 | JP 1989-77060 | 19890328 |
| PRIORITY APPLN. INFO.: | | | JP 1989-77060 | 19890328 |

OTHER SOURCE(S): MARPAT 115:219697
GI



I



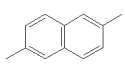
Q



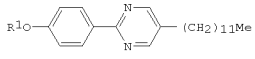
Q1

Q2

Q3



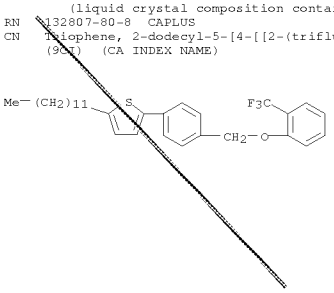
Q4



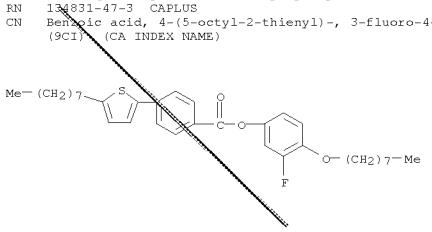
II

AB Liquid crystal compns. comprising I [R = (substituted) C1-16 alkyl, alkoxy, alkoxycarbonyl, acyloxy, alkoxycarbonyloxy; X = H, CF3, but at least one is CF3; Y = CO2, O2C, CH2O, OCH2; Z = 1,4-cyclohexylene, Q-Q4 wherein X1 = H, F, Cl, Br, cyano, Me; Z1 = O, S] are prepared A mixture of m-CF3C6H4CO2H, a phenol derivative II (R1 = H), DCC, and pyrrolidinopyridine in CH2Cl2 was stirred at room temperature to give 69% ester II (R1 = m-CF3C6H4CO), which showed crystalline-isotropic-smectic A-smectic C transition temperature of

L19 ANSWER 186 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
77.8°, 68.4°, and 62.1°, resp.
IT 132807-80-8
RL: PRP (Properties)
(liquid crystal composition containing)
RN 132807-80-8 CAPLUS
CN Thiophene, 2-dodecyl-5-[4-[[2-(trifluoromethyl)phenoxy]methyl]phenyl]- (9CI) (CA INDEX NAME)



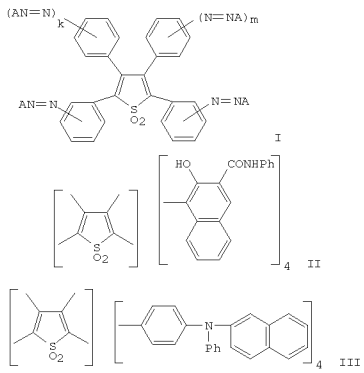
L19 ANSWER 187 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:594830 CAPLUS
DOCUMENT NUMBER: 115:194830
TITLE: Unusual smectic polymorphism of 3-fluoro-4-octyloxyphenyl 4-(5-octyl-2-thienyl)benzoate
AUTHOR(S): Butcher, Jane L.; Bunning, John D.; Byron, David J.; Tajbakhsh, Ali R.; Wilson, Robert C.
CORPORATE SOURCE: Dep. Chem. Phys., Nottingham Polytech., Nottingham, NG11 8NS, UK
SOURCE: Molecular Crystals and Liquid Crystals, Letters Section (1990), 7(3), 75-7
CODEN: MCLLDZ; ISSN: 0888-7489
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The smectic liquid crystal phases formed by 3-fluoro-4-octyloxyphenyl 4-(5-octyl-2-thienyl)benzoate were investigated by thermal optical microscopy, differential scanning calorimetry, and x-ray diffraction. The phase sequence SA-Sc-S3-SE is observed on cooling the isotropic liquid The S3 phase is structurally similar to an SA phase and hence corresponds to a 3rd smectic phase with unstructured layers.
IT 134831-47-3
RL: PRP (Properties)
(liquid crystal, smectic polymorphism of)
RN 134831-47-3 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 188 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:546584 CAPLUS
DOCUMENT NUMBER: 115:146584
TITLE: Coating compositions for fabrication of electrophotographic photoconductors
INVENTOR(S): Momotake, Hiroyuki; Sasagawa, Tomoyoshi; Koide, Tetsuhiro; Sugawa, Hiroshi
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

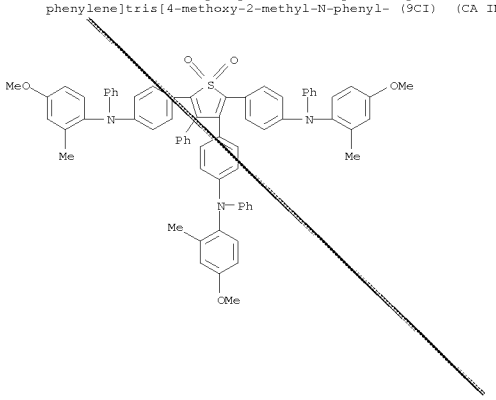
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 03024554 | A | 19910201 | JP 1989-158299 | 19890622 |
| JP 2815903 | B2 | 19981027 | | |
| PRIORITY APPLN. INFO.: | | | JP 1989-158299 | 19890622 |

OTHER SOURCE(S): MARPAT 115:146584
GI



AB The title coating compns. are dispersions of diazo dyes I (A = coupler group; k,m = 0, 1) in solvent solns. of poly(vinyl butyral). The invention includes similar dispersions in solvent solns. of vinyl chloride

L19 ANSWER 188 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
copolymers. These dispersions have high dispersed state and dispersion stability, and provide highly performing photoconductors. Thus, 2.5 g II was dispersed in 25 mL 10% soln. of Bakelite XYHL in THF, and mixed with 30 mL THF. An Al plate was coated with this dispersion and dried to form a 0.5-μm-thick charge-generating layer. A charge-transporting layer contg. III and polycarbonate was coated on the charge-generating layer, to obtain a photoconductor that showed high layer adhesion. The photoconductor was chargeable to -1010 V, which decayed to -930 V after 2 s, and showed residual voltage -5 V and sensitivity (lx-s required for half decay of charged voltage) 1.5. These values were -970 V, -900 V, -5 V and 1.5, resp., after 1000 charge-photodischarge cycles. The coating compn. showed no change on standing for 1 mo.
IT 136208-42-9
RL: USES (Uses)
(charge-transporting agent, electrophotog. photoconductors containing)
RN 136208-42-9 CAPLUS
CN Benzenamine, N,N',N''-[(1,1-dioxido-4-phenyl-2,3,5-thiophenetriyl)tri-4,1-phenylene]tris[4-methoxy-2-methyl-N-phenyl- (9CI) (CA INDEX NAME)



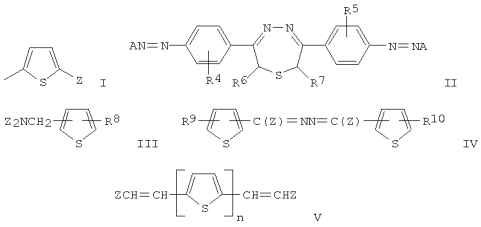
L19 ANSWER 189 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:482195 CAPLUS
DOCUMENT NUMBER: 115:82195
TITLE: Electrophotographic photoconductor with charge generating layer from bisazo compound
INVENTOR(S): Kuroda, Masami; Amano, Masayo; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 107 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 4018010 | A1 | 19901220 | DE 1990-4018010 | 19900605 |
| DE 4018010 | C2 | 19950427 | | |
| JP 03009365 | A | 19910117 | JP 1989-143523 | 19890606 |
| US 5087541 | A | 19920211 | US 1990-530088 | 19900531 |
| DE 4042455 | C2 | 19931007 | DE 1990-4042455 | 19900605 |
| DE 4042454 | C2 | 19960814 | DE 1990-4042454 | 19900605 |
| US 5198318 | A | 19930330 | US 1991-799601 | 19911127 |
| US 5266430 | A | 19931130 | US 1992-982897 | 19921130 |
| US 5275898 | A | 19940104 | US 1993-15915 | 19930210 |
| US 5286590 | A | 19940215 | US 1993-74545 | 19930611 |
| US 5292602 | A | 19940308 | US 1993-74597 | 19930611 |
| US 5292608 | A | 19940308 | US 1993-75300 | 19930611 |

PRIORITY APPLN. INFO.: JP 1989-143523 A 19890606
US 1990-530088 A3 19900531
DE 1990-4018010 A3 19900605
US 1991-799601 A3 19911127
US 1992-982897 A3 19921130
US 1993-15915 A3 19930210

OTHER SOURCE(S): MARPAT 115:82195
GI



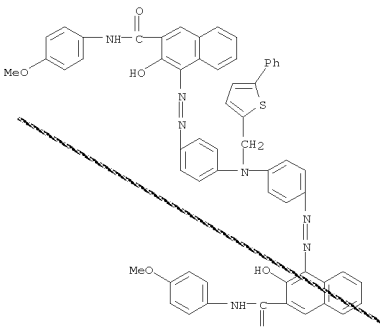
AB The title material contains a photosensitive layer containing a charge-generating agent from a disazo compound Z1CH:N-p-C6H4-N:CHZ1 (Z1 = I;
Z = AN:N-p-C6H4-; A = coupling group), Z1-Z1, II (R4, R5 = H, halogen, alkyl, alkoxy; R6, R7 = H, alkyl, aryl), III (R8 = H, halogen, alkyl, aryl, cyano), Z1-CH:NN:CHZ1, IV (R9, R10 = H, halogen, alkyl, aryl), Z1CH:CHZ1, or V (n = 1-3). The photoconductor has improved decay properties.

IT 134570-14-2 134570-51-7 134571-24-7
134571-26-9 134596-53-5
RL: USES (Uses)
(electrophotog. photoconductor with charge generating agent from)

RN 134570-14-2 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[[[(5-phenyl-2-thienyl)methyl]imino]bis(4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 189 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

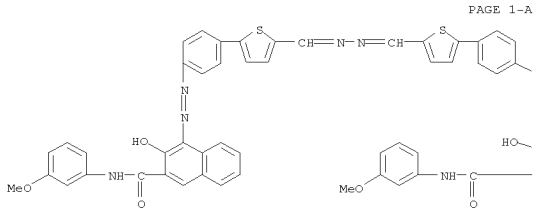


PAGE 2-A



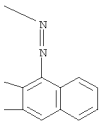
RN 134570-51-7 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[azinobis(methylidyne-5,2-thiophenediyl-4,1-phenyleneazo)]bis[3-hydroxy-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

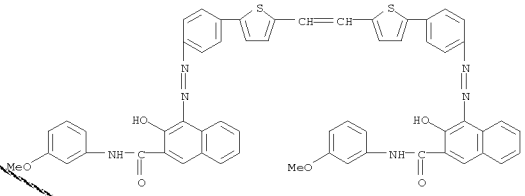


L19 ANSWER 189 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

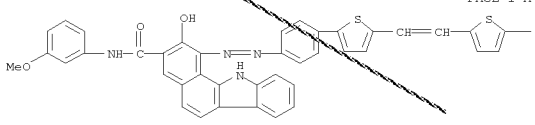


RN 134571-24-7 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[1,2-ethenediylbis(5,2-thiophenediyl-4,1-phenyleneazo)]bis[3-hydroxy-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)



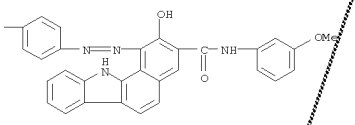
RN 134596-53-5 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[1,2-ethenediylbis(5,2-thiophenediyl-4,1-phenyleneazo)]bis[2-hydroxy-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



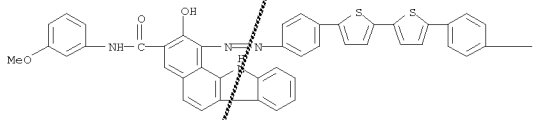
L19 ANSWER 189 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

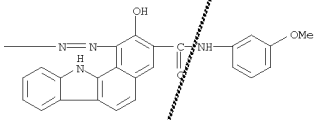


RN 134596-53-5 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[[2,2'-bithiophene]-5,5'-diylbis(4,1-phenyleneazo)]bis[2-hydroxy-N-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



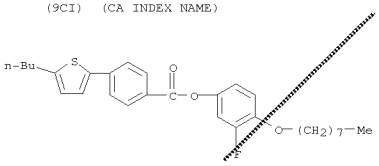
L19 ANSWER 190 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:439101 CAPLUS
DOCUMENT NUMBER: 115:39101
TITLE: An unusual sequence of smectic phases formed by members of the homologous series of 3-fluoro-4-octyloxyphenyl 4-(5-alkyl-2-thenyl)benzoates
AUTHOR(S): Butcher, J. L.; Byron, D. J.; Shirazi, S. N. R.; Tajbakhsh, A. R.; Wilson, R. C.; Bunning, J. D.
CORPORATE SOURCE: Dep. Chem. Phys., Nottingham Polytech., Nottingham, NG11 8NS, UK
SOURCE: Molecular Crystals and Liquid Crystals (1991), 199, 327-43
CODEN: MCLCA5; ISSN: 0026-8941
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nine 4-(5-alkyl-2-thienyl)benzoic acids were converted into esters by reaction with 3-fluoro-4-octyloxyphenol. The liquid crystal properties of these esters were investigated by thermal optical microscopy, differential scanning calorimetry, and x-ray diffraction. For the octyl and nonyl homologs the properties of the 3rd smectic phase in the sequence SA-SC-S3-SE observed on cooling the isotropic liquid are unusual. The S3 phase is orthogonal with unstructured layers corresponding with a 2nd SA phase. The 4-(5-alkyl-2-thienyl)benzoic acids also form liquid crystals and, in addition to the Sc phase shown by other homologs, the octyl-decyl compds. give rise to a 2nd, unidentified smectic phase.

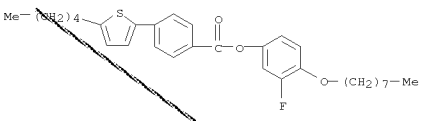
IT 134831-43-9P 134831-44-0P 134831-45-1P
134831-46-2P 134831-47-3P 134831-48-4P
134831-49-5P 134831-50-8P 134831-51-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(liquid crystal, preparation and transition temps. of)

RN 134831-43-9 CAPLUS
CN Benzoic acid, 4-(5-butyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)

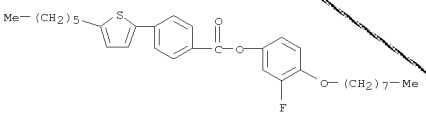


RN 134831-44-0 CAPLUS
CN Benzoic acid, 4-(5-pentyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)

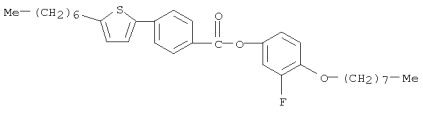
L19 ANSWER 190 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



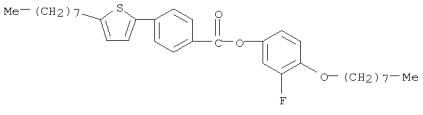
RN 134831-45-1 CAPLUS
CN Benzoic acid, 4-(5-hexyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



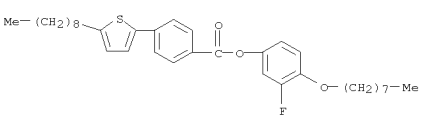
RN 134831-46-2 CAPLUS
CN Benzoic acid, 4-(5-heptyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



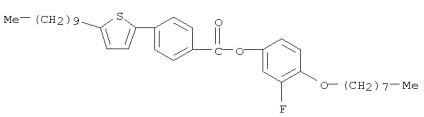
RN 134831-47-3 CAPLUS
CN Benzoic acid, 4-(5-octyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



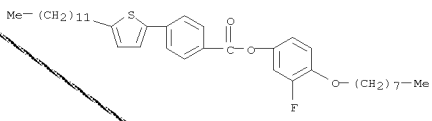
RN 134831-48-4 CAPLUS
CN Benzoic acid, 4-(5-nonyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



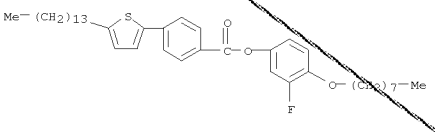
RN 134831-49-5 CAPLUS
CN Benzoic acid, 4-(5-decyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 134831-50-8 CAPLUS
CN Benzoic acid, 4-(5-dodecyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



RN 134831-51-9 CAPLUS
CN Benzoic acid, 4-(5-tetradecyl-2-thienyl)-, 3-fluoro-4-(octyloxy)phenyl ester (9CI) (CA INDEX NAME)



L19 ANSWER 190 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L19 ANSWER 191 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:256929 CAPLUS
DOCUMENT NUMBER: 114:256929
TITLE: Electrophotographic photoreceptors
INVENTOR(S): Yamada, Yasuyuki; Ito, Naoto; Nishizawa, Isao; Yamaguchi, Teruhiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 02277072 | A | 19901113 | JP 1989-97629 | 19890419 |
| PRIORITY APPLN. INFO.: | | | JP 1989-97629 | 19890419 |

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

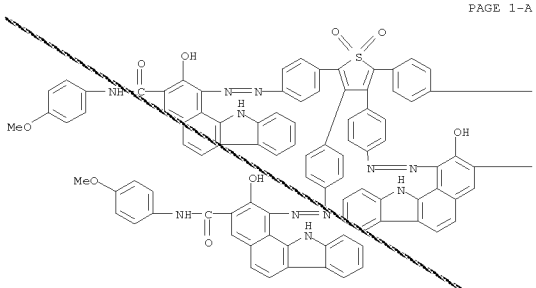
AB The single-layer photosensitive layer of the photoreceptor contains azo compound I and tetraphenylthiophenes II [A = coupler groups; R1-2 = alkyl, aralkyl, aryl; R1/R2 may jointly form a part of N-containing ring; k, m, n = 0, 1 (k ≤ m ≤ n)]. These pos.-charging, single-layer photoreceptors have high performance. Thus, an Al plate was coated with a composition containing polycarbonate 7, I (A = III) 1, IV 7.7 g and solvent and dried to obtain a photoconductor, which was chargeable to 974 V. This voltage decayed to 930 V after 2 s, and the sensitivity (lux-s required for half-decay of voltage on exposure) was 2.4, and the residual voltage was 0.

IT 116372-83-9
RL: USES (Uses)
(charge-generating agent, pos.-charging and single-layer electrophotog. photoreceptor containing)

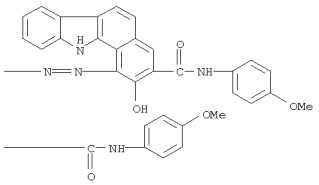
RN 116372-83-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 191 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

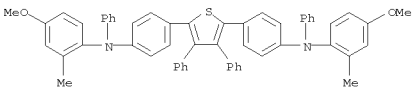


PAGE 1-B



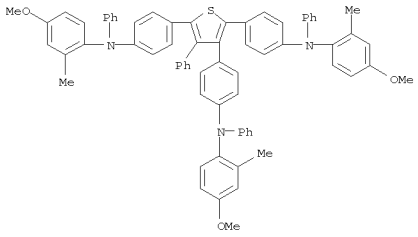
IT 123715-38-8 123715-39-9 134008-74-5
RL: USES (Uses)
(charge-transporting agent, pos.-charging and single-layer electrophotog. photoreceptor containing)

RN 123715-38-8 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)

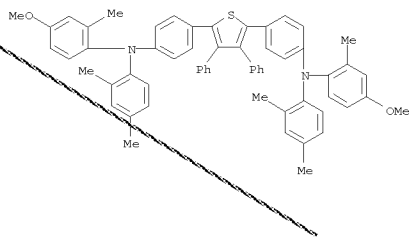


L19 ANSWER 191 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 123715-39-9 CAPLUS
CN Benzenamine, 4,4',4''-(4-phenyl-2,3,5-thiophenetriyl)tris[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



RN 134008-74-5 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N-(2,4-dimethylphenyl)-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)



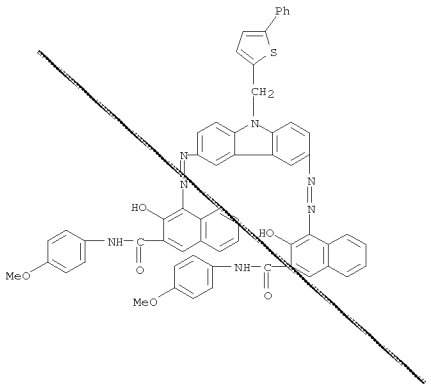
L19 ANSWER 192 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:218086 CAPLUS
DOCUMENT NUMBER: 114:218086
TITLE: Electrophotographic photoconductors
INVENTOR(S): Amano, Masayo; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 02308170 | A | 19901221 | JP 1989-129380 | 19890523 |
| JP 2518392 | B2 | 19960724 | | |

PRIORITY APPLN. INFO.: JP 1989-129380 19890523

GI For diagram(s), see printed CA Issue.
AB The photosensitive layer of the photoconductor contains bisazo dyes I, II, and/or III (A = coupler group; R1, R6 = H, halo, NO2, alkyl, alkoxy; R2, R5 = H, halo, alkyl, alkoxy; R3-4 = H, alkyl, aryl; R7 = H, halo, alkyl, aryl; n = 0, 1). Typically groups A are selected from IV to X (Z = aromatic or heterocyclic ring; X1 = H, COOR8, CONR9R10; R8-10 = H, alkyl, aryl, heterocyclyl; X2, X5 = alkyl, aryl, heterocyclyl; X3, X6 = H, cyano, carbamoyl, carboxyl, ester, acyl; X4, X11 = H, alkyl, cycloalkyl, alkenyl, aralkyl, aryl, heterocyclyl; X7, X8 = H, halo, NO2, alkyl, alkoxy; X9 = alkyl, aryl, carboxyl, ester; X10 = aryl, heterocyclyl; Y = heterocyclic ring). These charge-generating agents provide high sensitivity and stability in both pos. and neg. charging mode. Thus, an Al-coated polyester film was coated with a composition containing I (R1-6 = H, A = XI) 50, polyester 100, 1-phenyl-3-(p-diethylaminostyryl)-5-(p-diethylaminophenyl)-2-pyrazoline 100 parts and THF to obtain a photoconductor, which was charged to 650 V and showed sensitivity (lux-s required for half decay of voltage) 5.0, and residual voltage after discharging by irradiation 80 V.
IT 133542-61-7
RL: USES (Uses)
(as charge generator, for electrophotog. photoconductors)
RN 133542-61-7 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[[9-[(5-phenyl-2-thienyl)methyl]-9H-carbazole-3,6-diyl]bis(azo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

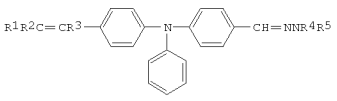
L19 ANSWER 192 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 193 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:218044 CAPLUS
DOCUMENT NUMBER: 114:218044
TITLE: Electrophotographic photoreceptor containing hydrazone
INVENTOR(S): Yamada, Yasuyuki; Akahori, Hiroyuki; Enomoto, Katashi; Itoh, Hisato; Nishizawa, Tsutomu; Yamaguchi, Akihiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| EP 392805 | A1 | 19901017 | EP 1990-303855 | | 19900410 |
| EP 392805 | B1 | 19940615 | | | |
| R: CH, DE, FR, GB, IT, LI, NL | | | | | |
| JP 02308861 | A | 19901221 | JP 1989-130067 | | 19890525 |
| JP 02308862 | A | 19901221 | JP 1989-130068 | | 19890525 |
| JP 03048254 | A | 19910301 | JP 1990-88385 | | 19900404 |
| US 5132190 | A | 19920721 | US 1990-505273 | | 19900409 |
| CA 2014298 | A1 | 19901010 | CA 1990-2014298 | | 19900410 |
| JP 03073961 | A | 19910328 | JP 1990-96223 | | 19900413 |
| JP 03200972 | A | 19910902 | JP 1990-211585 | | 19900813 |
| US 5235104 | A | 19930810 | US 1992-879014 | | 19920506 |
| PRIORITY APPLN. INFO.: | | | JP 1989-88048 | A | 19890410 |
| | | | JP 1989-107594 | A | 19890428 |
| | | | JP 1989-130067 | A | 19890525 |
| | | | JP 1989-130068 | A | 19890525 |
| | | | JP 1989-262205 | A | 19891009 |
| | | | US 1990-505273 | A3 | 19900409 |

OTHER SOURCE(S): MARPAT 114:218044
GI

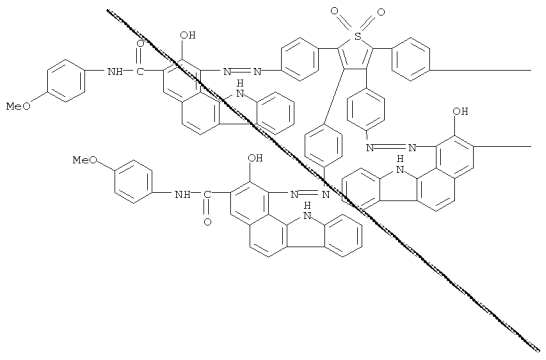


I

AB An electrophotog. photoreceptor which exhibits high sensitivity and excellent durability comprises a photosensitive layer containing a charge-generating agent and a hydrazone having the general formula I (R1,R2 = aryl or R1 and R2 together may form a polycyclic group; R3 = H, halo, alkyl, or Ph; R4, R5 = alkyl, aralkyl, or aryl, with the proviso that ≥1 of R4 and R5 is an aryl group) and obtained by condensing H2NNR4R5 with the corresponding aldehyde as a charge-transporting agent. The hydrazone thus obtained has sufficiently high ability to receive elec. charges generated by the charge-generating agent, ability to rapidly transport the elec. charges thus received, and ability fo fully transport the elec. charges even in a low elec. field, so that no residual elec. charges remain.
IT 116372-83-9
RL: USES (Uses)
(charge-generating agent, for electrophotog. photoconductor containing hydrazone charge-transporting agent)
RN 116372-83-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

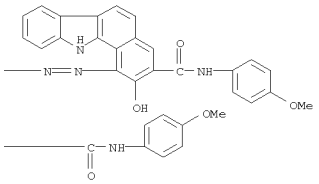
L19 ANSWER 193 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



L19 ANSWER 193 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

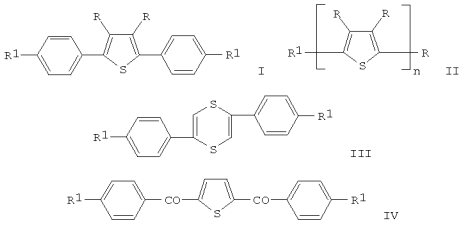


L19 ANSWER 194 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:196318 CAPLUS
DOCUMENT NUMBER: 114:196318
TITLE: Electrophotographic photoconductor with tetrakisazo compound as charge-generating agent
INVENTOR(S): Kuroda, Masami; Hattori, Yoshimasa; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 54 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 4001351 | A1 | 19900802 | DE 1990-4001351 | 19900118 |
| DE 4001351 | C2 | 19950316 | | |
| JP 02189554 | A | 19900725 | JP 1989-10801 | 19890119 |
| JP 2629929 | B2 | 19970716 | | |
| US 4971876 | A | 19901120 | US 1990-466581 | 19900117 |
| DE 4042427 | C2 | 19940331 | DE 1990-4042427 | 19900118 |
| PRIORITY APPLN. INFO.: | | | JP 1989-10801 | A 19890119 |
| | | | DE 1990-4001351 | A3 19900118 |

OTHER SOURCE(S): MARPAT 114:196318
GI



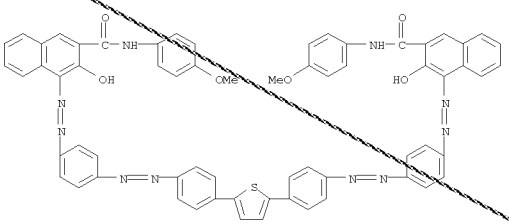
AB An electrophotog. photoconductor is described comprising a photosensitive layer containing a charge-generating agent having the formula I, II, III, or IV [R = H, alkyl, aryl; R1 = AN:NC6H4-p-N:N; A = a coupler group; n =

L19 ANSWER 194 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

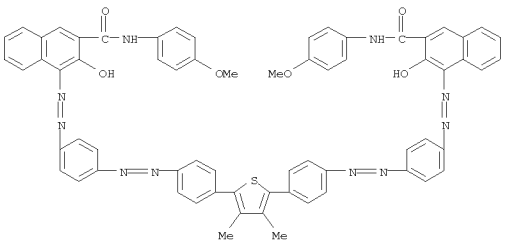
2,3]. The photoconductor has improved charging properties.

IT 133431-06-8 133431-27-3 133456-29-8
RL: USES (Uses)
(as charge-generating agent for electrophotog. photoconductor)

RN 133431-06-8 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[2,5-thiophenediylbis(4,1-phenyleneazo-4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

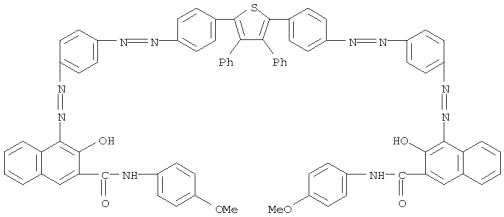


RN 133431-27-3 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-dimethyl-2,5-thiophenediyl)bis(4,1-phenyleneazo-4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 133456-29-8 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo-4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

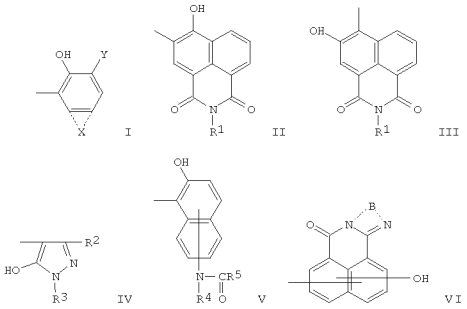
L19 ANSWER 194 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 195 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:621270 CAPLUS
DOCUMENT NUMBER: 113:221270
TITLE: Electrophotographic photoreceptor
INVENTOR(S): Kitatani, Katsushi; Hoshi, Satoshi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 29 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 02108060 | A | 19900419 | JP 1988-262201 | 19881018 |
| PRIORITY APPLN. INFO.: | | | JP 1988-262201 | 19881018 |

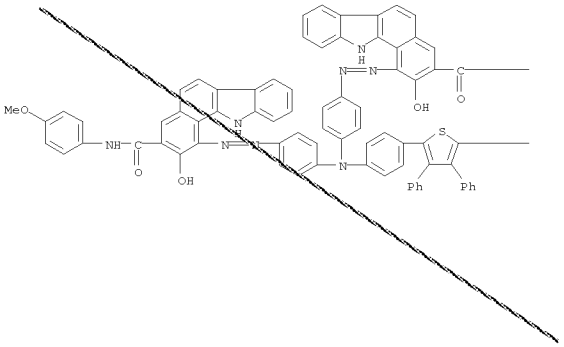
GI



AB The title electrophotog. photoreceptor contains ≥1 trisazo derivative, (AN:NAr1)(AN:NAr2)NAr3LAr4N:NA [Ar1,Ar2,Ar3,Ar4 = arylene, divalent condensed polycyclic aromatic group, divalent heterocyclic aromatic group; Ar1
and Ar2,Ar2 and Ar3,Ar3 and Ar1 may form a ring; L = NHCO, CONH, NHSO2, SO2NH; A = I, II, III, IV, C(COCH3)HCONR3R4, V, VI (X = aromatic ring, heterocyclic ring; Y = CONR4R5, CONHN:CR4R5, CO2R5; R1 = alkyl, phenyl; R2

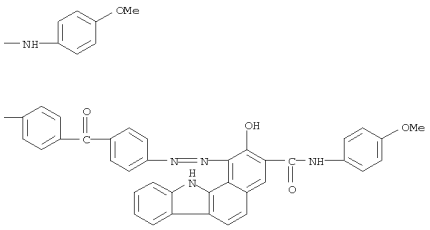
L19 ANSWER 195 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
= H, lower alkyl, carbamoyl, carboxyl, alkoxycarbonyl, aryloxycarbonyl, amino; R3 = alkyl, arom., heterocyclic arom.; R4,R5 = H, alkyl, arom., heterocyclic arom.; R4 = R5 ≠ H; when Y = CO2R5, R5 ≠ H; B = divalent arom. hydrocarbon, divalent N-contg. heterocyclic ring)] as a charge carrier-generating material.
IT 130558-10-0
RL: USES (Uses)
(charge carrier-generating material from, for electrophotog. photoreceptor)
RN 130558-10-0 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[[[4-[5-[4-[4-[[2-hydroxy-3-[[(4-methoxyphenyl)amino]carbonyl]-11H-benzo[a]carbazol-1-yl]azo]benzoyl]phenyl]-3,4-diphenyl-2-thienyl]phenyl]imino]bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



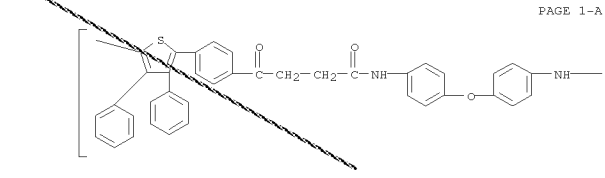
L19 ANSWER 195 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



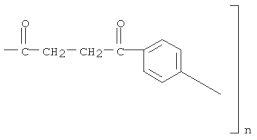
L19 ANSWER 196 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:572853 CAPLUS
DOCUMENT NUMBER: 113:172853
TITLE: Synthesis and characterization of aromatic-aliphatic polyamides containing tetraphenylthiophene units into the backbone
AUTHOR(S): Mahajan, Sudhakar S.; Sarwade, Bhimrao D.; Maldar, Noormahmad N.
CORPORATE SOURCE: Natl. Chem. Lab., Div. Polym. Chem., Pune, 411 008, India
SOURCE: Polymer Bulletin (Berlin, Germany) (1990), 24(2), 143-9
CODEN: POBUDR; ISSN: 0170-0839
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Aromatic-aliphatic polyamides were prepared from 2,5-bis[4-(carboxyethylcarbonyl)phenyl]-3,4-diphenylthiophene and aromatic diamines by
using the Yamazaki phosphorylation reaction. The polymers were obtained in good yields and were characterized by solubility tests, viscosity measurements, IR spectroscopy, thermal anal., and x-ray diffraction studies. These polyamides had inherent viscosities 0.35-0.70 dL/g and were amorphous in nature. All the polyamides were readily soluble in solvents such as AcNMe2, N-methyl-2-pyrrolidinone, DMF, PhNO2, (Me2N)3PO, m-cresol, and H2SO4 and did not lose weight at <300° in air.
IT 129709-67-7P, 2,5-Bis[4-[(2-carboxyethyl)carbonyl]phenyl]-3,4-diphenylthiophene-4,4'-oxydianiline copolymer, sru
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of heat-resistant)
RN 129709-67-7 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylene(1,4-dioxo-1,4-butanediyl)imino-1,4-phenyleneoxy-1,4-phenyleneimino(1,4-dioxo-1,4-butanediyl)-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 196 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



L19 ANSWER 197 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

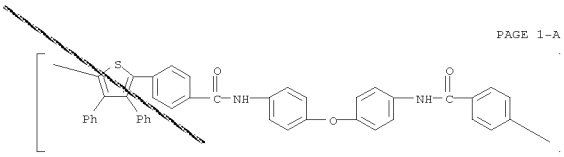
ACCESSION NUMBER: 1990:553169 CAPLUS
DOCUMENT NUMBER: 113:153169
TITLE: Novel synthesis of aromatic polyamides by nickel-catalyzed polycondensation of aromatic dibromides, an aromatic diamine, and carbon monoxide
AUTHOR(S): Yoneyama, Masaru; Konishi, Toru; Kakimoto, Masaaki; Imai, Yoshio
CORPORATE SOURCE: Dep. Org. Polym. Mater., Tokyo, Inst. Technol., Tokyo, 152, Japan
SOURCE: Makromolekulare Chemie, Rapid Communications (1990), 11(8), 381-6
CODEN: MCRCD4; ISSN: 0173-2803
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Aromatic polyamides were prepared in the presence of Ni-containing catalysts [NiCl2, NiBr2, dichloro(2,2'-bipyridyl)nickel(II), and 2,2'-bipyridyl/NiCl2 complexes] by polymerization of bis(4-bromophenyl) ether (I) and bis(4-bromophenyl) ether, m-dibromobenzene (II), or 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene, with CO, using aprotic polar solvents and 1,8-diazabicyclo[5.4.0]-7-undecene as an HBr scavenger. Highest-viscosity (0.21 dL/g) I-II-CO copolymer was formed at 150°, while that prepared at 180° had viscosity 0.17 dL/g and no polymer was formed at 100°. No appreciable difference was in catalytic activity was observed with respect to the inherent viscosity of the resulting aramids. IR and NMR spectra confirmed formation of amide linkages.

IT 97429-39-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, in presence of nickel catalysts)

RN 97429-39-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 197 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

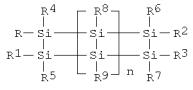
PAGE 1-B

L19 ANSWER 198 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:506394 CAPLUS
DOCUMENT NUMBER: 113:106394
TITLE: Electrophotographic photoreceptors using a ladder-type silicon polymer as a charge-transporting agent
INVENTOR(S): Sugawa, Hiroshi; Momotake, Hiroyuki; Sasagawa, Tomoyoshi; Koide, Tetsuhiro; Kobayashi, Mineo; Ito, Masayoshi
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 02019853 | A | 19900123 | JP 1988-168998 | 19880708 |
| JP 2702160 | B2 | 19980121 | | |
| PRIORITY APPLN. INFO.: | | | JP 1988-168998 | 19880708 |

GI



I

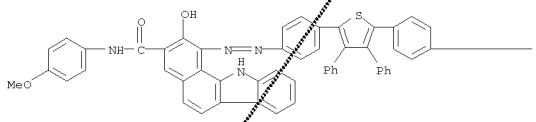
AB The photoreceptors comprise a conductive support with a photosensitive layer containing an organic Si compound I (R, R1-9 = H, halo, ether group, C≤20 alkyl, alkenyl, aryl which may contain functional group such as CO2H, NH2, Cl, OH, etc.; n = 0, pos. integer). The photoreceptors show increased photosensitivity and durability. Thus, an Al plate was coated with a charge-generating layer containing a disazo pigment and with a charge-transporting layer containing I (R, R1-3 = Cl, R4-9 = CHMe2, n = 10) to give a photoreceptor.

IT 116372-51-1
RL: USES (Uses)
(charge-generating agent, electrophotog. photoreceptor containing organic silicon polymer and)

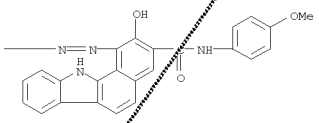
RN 116372-51-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

L19 ANSWER 198 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



L19 ANSWER 199 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:479265 CAPLUS
DOCUMENT NUMBER: 113:79265
TITLE: Manufacture of heat-resistant aromatic polyesters with good mechanical strength
INVENTOR(S): Imai, Yoshio; Kakimoto, Masaaki; Yoneyama, Masaru
PATENT ASSIGNEE(S): Tosoh Corp., Japan
SOURCE: Eur. Pat. Appl., 10 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 355840 | A2 | 19900228 | EP 1989-115707 | 19890825 |
| EP 355840 | A3 | 19910814 | | |
| R: BE, DE, FR, GB, IT, NL | | | | |
| JP 02060919 | A | 19900301 | JP 1988-210590 | 19880826 |
| JP 2638981 | B2 | 19970806 | | |
| CA 1338594 | C | 19960910 | CA 1989-609466 | 19890825 |
| US 4948864 | A | 19900814 | US 1989-400143 | 19890828 |
| PRIORITY APPLN. INFO.: | | | JP 1988-210590 A | 19880826 |

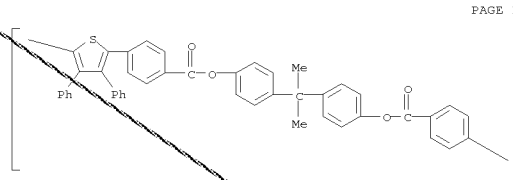
AB The title moderate mol. weight polyesters (OAr1O2CAr2CO)n (Ar1, Ar2 = bivalent aromatic residue; n = 10-100) are prepared in good yield from stable inexpensive reactants of aromatic diols HOAr1OH, aromatic dibromides BrAr2Br, and carbon monoxide, in presence of Pd catalysts and organic bases in organic solvents. Bis(4-bromophenyl) ether 2.5, bisphenol A 2.5, 1,8-diazabicyclo[5,4,0]undec-7-ene 5.5, dichlorobis(triphenylphosphine)pal ladium 0.10 mmol in 10 mL PhCl were heated 1.5 h at 115° in CO atmospheric, diluted with 40 mL PhCl, and poured into 450 mL MeOH to give a polyester with 99% yield.

IT 104909-92-4P 128382-04-7P 128382-07-0P
RL: PREP (Preparation)
(preparation of, palladium catalysts for)

RN 104909-92-4 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

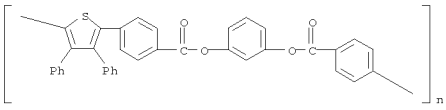
L19 ANSWER 199 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

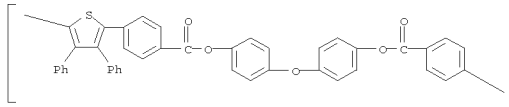
RN 128382-04-7 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,3-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)



RN 128382-07-0 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenyleneoxy-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

L19 ANSWER 199 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

L19 ANSWER 200 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:414802 CAPLUS
DOCUMENT NUMBER: 113:14802
TITLE: Octazonium salt compounds and tetrakisazo compounds and manufacture thereof
INVENTOR(S): Yamada, Yasuyuki; Ito, Naoto; Nishizawa, Isao; Yamaguchi, Teruhiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01230573 | A | 19890914 | JP 1988-277303 | 19881104 |
| JP 08026013 | B | 19960313 | | |

PRIORITY APPLN. INFO.: JP 1987-290700 A1 19871119

GI

I

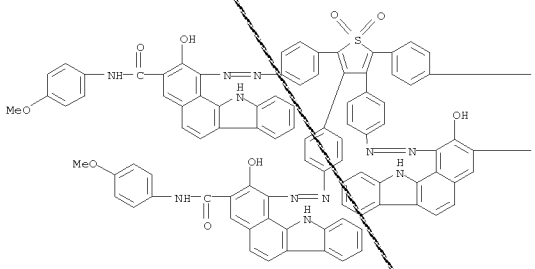
AB The title salts have the general formula Q(-p-C6H4N2+ X-)4 (Q = thiophene-1,1-dioxide-2,3,4,5-tetrayl; X- = anion) which are coupled with I [at o-position with respect to OH, Z = (un)substituted carbo- or heterocycle member; Y = -CONR1R2, CONHN:CR3R4; R1 = (un)substituted carbo-
or heterocycle group; R2 = H, (un)substituted alkyl, phenyl; R3 = (un)substituted carbocycle group; R4 = H, alkyl, (un)substituted phenyl; R3R4 = ring member] to give the title tetrakisazo compds. Q(-p-C6H7N:NA)4 useful as charge generators in electrophotog. photoconductors.

IT 116372-83-9P 127637-34-7P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture and use of, as charge generator in electrophotog. photoconductors)

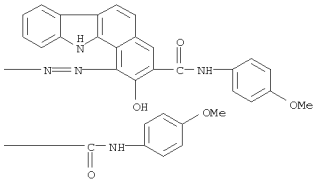
RN 116372-83-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 200 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



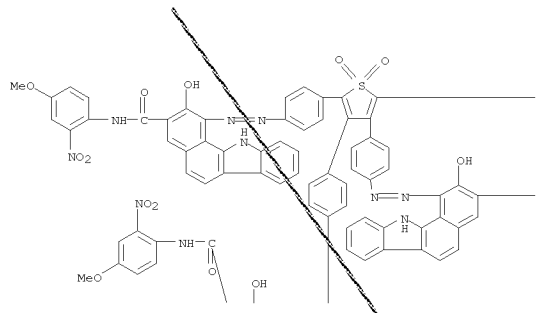
PAGE 1-B



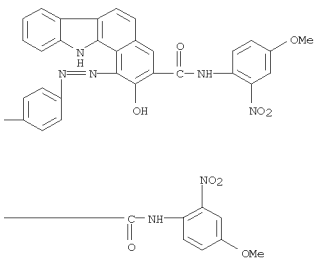
RN 127637-34-7 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxy-2-nitrophenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 200 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

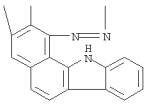


PAGE 1-B



L19 ANSWER 200 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

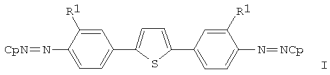
PAGE 2-A



L19 ANSWER 201 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:243024 CAPLUS
DOCUMENT NUMBER: 112:243024
TITLE: Electrophotographic photoconductor with bisazo compound as charge generator
INVENTOR(S): Hattori, Yoshimasa; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 44 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| DE 3918463 | A1 | 19891214 | DE 1989-3918463 | | 19890606 |
| DE 3918463 | C2 | 19950316 | | | |
| JP 02084660 | A | 19900326 | JP 1989-50771 | | 19890302 |
| JP 2650403 | B2 | 19970903 | | | |
| US 4935323 | A | 19900619 | US 1989-361660 | | 19890602 |
| PRIORITY APPLN. INFO.: | | | JP 1988-140874 | A | 19880608 |
| | | | JP 1988-163018 | A | 19880630 |
| | | | JP 1988-163020 | A | 19880630 |
| | | | JP 1988-163021 | A | 19880630 |
| | | | JP 1989-50771 | A | 19890302 |

OTHER SOURCE(S): MARPAT 112:243024
GI



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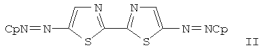
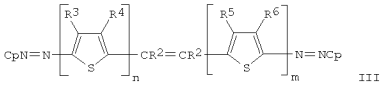


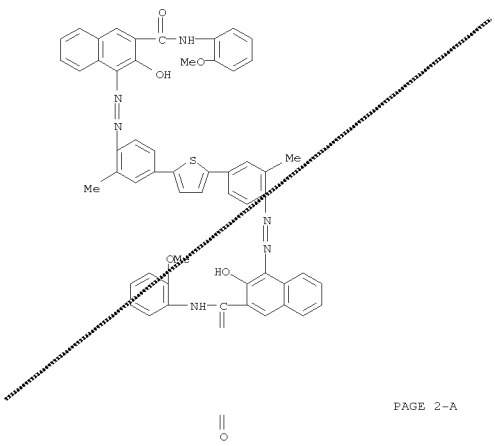
II



III

L19 ANSWER 201 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
AB An electrophotog. photoconductor is described containing a charge-generating agent from ≥1 bisazo compound of the structure I, II, III, and/or CpN:NArAr2Ar1N:NCP [Cp = a coupling group; R1 = H, alkyl, alkoxy, carbamoyl; Ar1 = thienylene, thiazolylene; Ar2 = phenylene, thienylene; Ar1 and Ar2 are not thienyl simultaneously; R2 = H, alkyl, Ph; R3-R6 = H, alkyl, alkoxy, aromatic hydrocarbon group, aromatic heterocyclyl; m, n = 1-3].
The material has improved photosensitivity.
IT 127296-55-3 127296-59-7 127296-60-0
127297-45-4
RL: USES (Uses)
(as charge generator, for electrophotog. photoconductor)
RN 127296-55-3 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[2,5-thiophenediylbis[(2-methyl-4,1-phenylene)azo]]bis[3-hydroxy-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



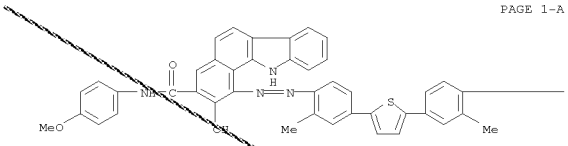
PAGE 2-A



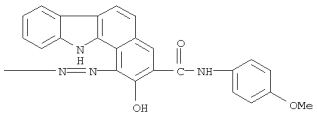
RN 127296-59-7 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[2,5-thiophenediylbis[(2-methyl-

L19 ANSWER 201 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
4,1-phenylene)azo]]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

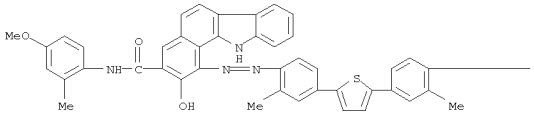


PAGE 1-B



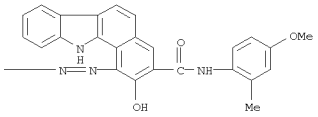
RN 127296-60-0 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[2,5-thiophenediylbis[(2-methyl-4,1-phenylene)azo]]bis[2-hydroxy-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



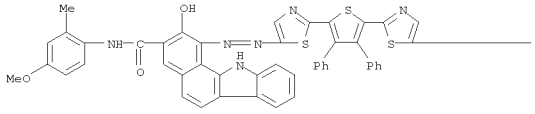
L19 ANSWER 201 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

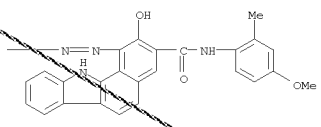


RN 127297-45-4 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(2,5-thiazolediylazo)]bis[2-hydroxy-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



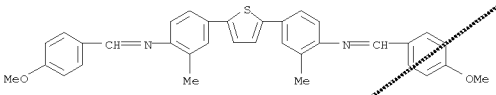
PAGE 1-B



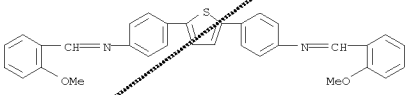
L19 ANSWER 202 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:207872 CAPLUS
DOCUMENT NUMBER: 112:207872
TITLE: Electrophotographic photoreceptor with photoconductive layer containing thienyl group-containing Schiff bases
INVENTOR(S): Kuroda, Masami; Nakamura, Yoichi; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01237554 | A | 19890922 | JP 1988-64614 | 19880317 |
| PRIORITY APPLN. INFO.: | | | JP 1988-64614 | 19880317 |

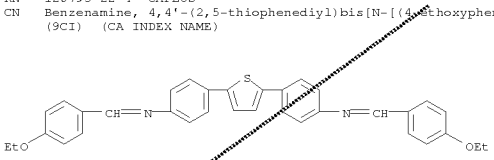
AB In the electrophotog. photoreceptor, the photoconductive layer contains ≥1 thienyl group-containing Schiff base as a charge-transporting agent. The photoreceptor shows improved chargeability, durability, and sensitivity.
IT 126793-16-6 126793-17-7 126793-22-4
RL: USES (Uses)
(charge-transporting material, electrophotog. photoreceptor using)
RN 126793-16-6 CAPLUS
CN Benzenamine, 4,4'-(2,5-thiophenediyl)bis[N-[(4-methoxyphenyl)methylene]-2-methyl- (9CI) (CA INDEX NAME)



RN 126793-17-7 CAPLUS
CN Benzenamine, 4,4'-(2,5-thiophenediyl)bis[N-[(2-methoxyphenyl)methylene]-(9CI) (CA INDEX NAME)



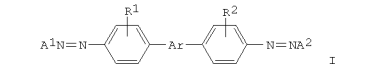
L19 ANSWER 202 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 126793-22-4 CAPLUS
CN Benzenamine, 4,4'-(2,5-thiophenediyl)bis[N-[(4-ethoxyphenyl)methylene]-(9CI) (CA INDEX NAME)



L19 ANSWER 203 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:188931 CAPLUS
DOCUMENT NUMBER: 112:188931
TITLE: Electrophotographic photoconductors containing charge-generating disazo pigments
INVENTOR(S): Shiino, Yasuko; Umehara, Masashige; Matsumoto, Masakazu
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01100558 | A | 19890418 | JP 1987-257375 | 19871014 |
| PRIORITY APPLN. INFO.: | | | JP 1987-257375 | 19871014 |

GI



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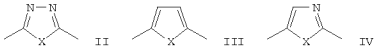
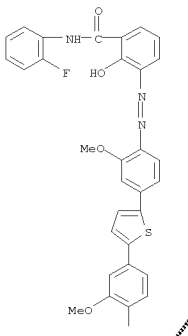


II III IV

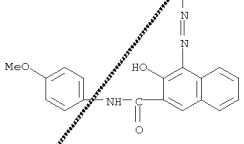
AB The charge-generating layers of electrophotog. photoconductors contain unsym. disazo pigments of the formula I (R1, R2 = H, alkyl having optional substituents, alkoxy, halo; A1, A2 = coupler having phenolic OH; Ar = II, III, IV wherein X = O, S).
IT 126619-30-5 126619-35-0 126619-41-8
126666-99-7
RL: TEM (Technical or engineered material use); USES (Uses)
(electrophotog. charge-generating agent)
RN 126619-30-5 CAPLUS
CN 2-Naphthalenecarboxamide, 4-[[4-[5-[4-[[3-[[(2-fluorophenyl)amino]carbonyl]-2-hydroxyphenyl]azo]-3-methoxyphenyl]-2-thienyl]-2-methoxyphenyl]azo]-3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 203 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



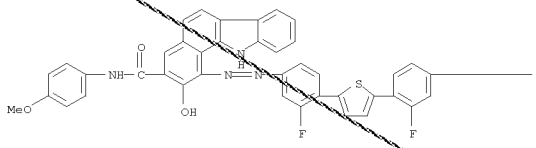
PAGE 2-A



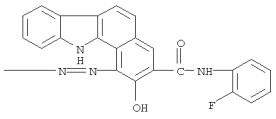
RN 126619-35-0 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1-[[3-fluoro-4-[5-[2-fluoro-4-[[3-[[(2-fluorophenyl)amino]carbonyl]-2-hydroxy-11H-benzo[a]carbazol-1-yl]azo]phenyl]-2-thienyl]phenyl]azo]-2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 203 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



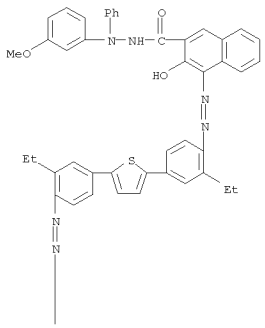
PAGE 1-B



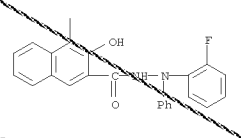
RN 126619-41-8 CAPLUS
CN 2-Naphthalenecarboxylic acid, 4-[[2-ethyl-4-[5-[3-ethyl-4-[[3-[[2-(2-fluorophenyl)-2-phenylhydrazino]carbonyl]-2-hydroxy-1-naphthalenyl]azo]phenyl]-2-thienyl]phenyl]azo]-3-hydroxy-, 2-(3-methoxyphenyl)-2-phenylhydrazide (9CI) (CA INDEX NAME)

L19 ANSWER 203 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A

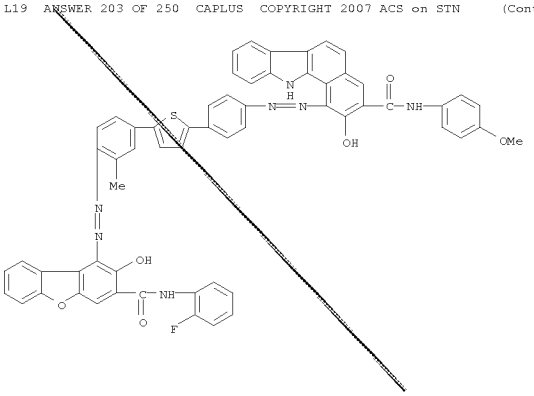


PAGE 2-A



RN 126666-99-7 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1-[[4-[5-[4-[[3-[[(2-fluorophenyl)amino]carbonyl]-2-hydroxy-1-dibenzofuranyl]azo]-3-methylphenyl]-2-thienyl]phenyl]azo]-2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 203 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

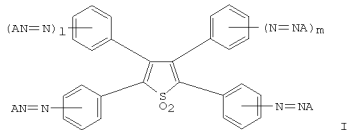


L19 ANSWER 204 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1990:129095 CAPLUS
DOCUMENT NUMBER: 112:129095
TITLE: Preparation of bis-, tris- and tetrakisazo derivatives of tetraphenylthiophene-1,1-dioxide as charge-generating materials for electrophotographic receptors
INVENTOR(S): Yamada, Yasuhiro; Nishizawa, Isao; Ito, Naoto; Yamaguchi, Teruhiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01107267 | A | 19890425 | JP 1987-263704 | 19871021 |
| PRIORITY APPLN. INFO.: | | | JP 1987-263704 | 19871021 |

GI



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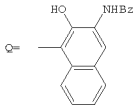


AB Electrophotog. receptors containing at least one of tetraphenylthiophene-1,1-oxide derivs. I (A = coupler residue; l, m = 1, 0) in a photosensitive layer on an electroconductive support are described as well as preparation of I and imaging process for high durability, high sensitivity, and broad absorbance characteristic in visible region. Thus, diazotization of 5-bis(4-aminophenyl)-3,4-diphenylthiophene-1,1-dioxide by NaNO2 in aqueous H2SO4 gave a tetrazonium salt which was coupled with Naphthol AS in DMF in

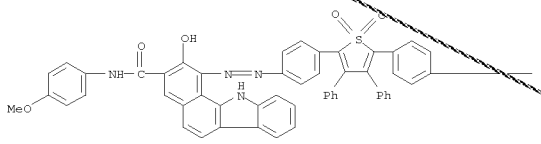
L19 ANSWER 204 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

the presence of AcONa to give 78.1% I (A = 4-Q, l = m = 0).

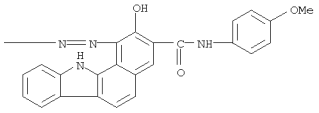
IT 116372-66-8P 116372-83-9P 116372-98-6P
124974-18-1P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of, as charge-generating material for electrophotog. receptors)

RN 116372-66-8 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(1,1-dioxido-3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



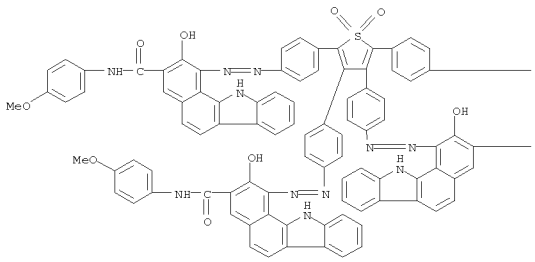
PAGE 1-B



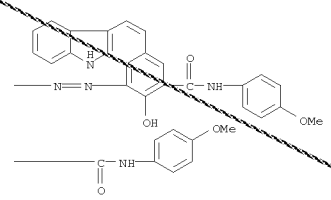
RN 116372-83-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 204 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



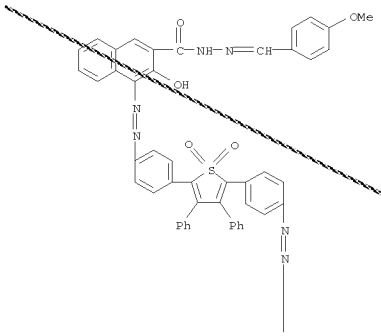
PAGE 1-B



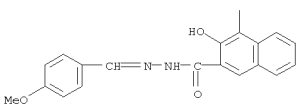
RN 116372-98-6 CAPLUS
CN 2-Naphthalenecarboxylic acid, 4,4'-[(1,1-dioxido-3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-, bis[[(4-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)

L19 ANSWER 204 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



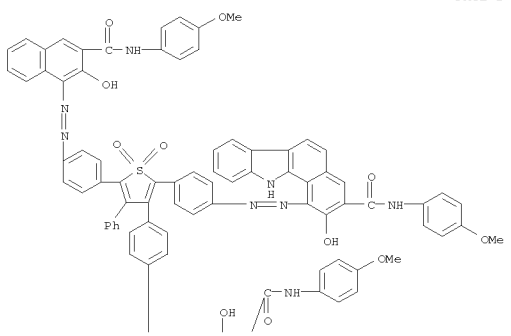
PAGE 2-A



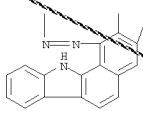
RN 124974-18-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[[5-[4-[[2-hydroxy-3-[[(4-methoxyphenyl)amino]carbonyl]-1-naphthalenyl]azo]phenyl]-1,1-dioxido-4-phenyl-2,3-thiophenediyl]bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 204 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



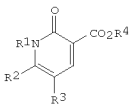
PAGE 2-A

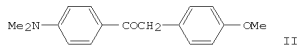


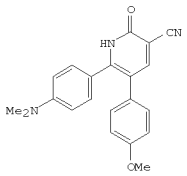
L19 ANSWER 205 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:118654 CAPLUS
DOCUMENT NUMBER: 112:118654
TITLE: Preparation of 5,6-di(hetero)aryl-1,2-dihydro-2-oxo-3-pyridinecarboxylates as antibacterial agents
INVENTOR(S): Biftu, Tesfaye; Heck, James V.; Thorsett, Eugene D.
PATENT ASSIGNEE(S): Merck and Co., Inc., USA
SOURCE: Eur. Pat. Appl., 43 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 308020 | A2 | 19890322 | EP 1988-201974 | 19880909 |
| EP 308020 | A3 | 19901205 | | |
| R: CH, DE, FR, GB, IT, LI, NL | | | | |
| JP 01128969 | A | 19890522 | JP 1988-231505 | 19880917 |
| PRIORITY APPLN. INFO.: | | | US 1987-98632 A | 19870918 |

OTHER SOURCE(S): MARPAT 112:118654
GI

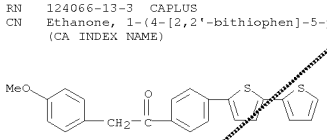

I


II


III

AB The title compds. [I; R1 = H, C1-6 alkyl, C2-6 alkenyl, C7-14 aralkyl, etc.; R2, R3 = (substituted) aryl containing 6, 10, or 14 ring C atoms, heteroaryl, etc.; R4 = H, C1-6 alkyl, a prodrug ester group, a pharmaceutically acceptable cation], useful for treating bacterial infections, are prepared A mixture of ethanone derivative II (preparation given) and

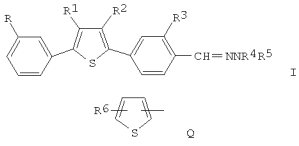
L19 ANSWER 205 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
(MeO)2CHNMe2 in DMF was heated at 25°, concd., NCCH2CONH2 and MeOH added, the soln. was added to a slurry of NaH in DMF and heated at 95° to give III, which was heated in 6 M H2SO4 at 120° to give the acid I [R1 = R4 = H, R2 = 4-(Me2N)C6H4 R3 = p-MeOC6H4] (IV). Acid hydrolysis of IV with 48% HBr gave phenolic deriv. I (R3 = p-HOC6H4, other groups as in IV), which showed min. inhibitory concn. of 0.25 μg/mL against Staphylococcus aureus MB 2865.
IT 124066-13-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antibacterials)
RN 124066-13-3 CAPLUS
CN Ethanone, 1-(4-[2,2'-bithiophen]-5-ylphenyl)-2-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 206 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:108568 CAPLUS
DOCUMENT NUMBER: 112:108568
TITLE: Electrophotographic photoreceptors containing a hydrazone charge-transporting agent
INVENTOR(S): Kuroda, Masami; Nakamura, Yoichi; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01164951 | A | 19890629 | JP 1987-323237 | 19871221 |
| PRIORITY APPLN. INFO.: | | | JP 1987-323237 | 19871221 |

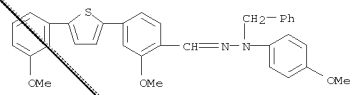
GI


I

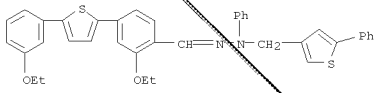

Q

AB Electrophotog. photoreceptors exhibiting good sensitivity and cyclicability have a photosensitive layer containing ≥1 compds. selected from hydrazones I [R, R3 = OH, alkoxy; R1, R2 = H, halo, alkyl, alkoxy, NO2, allyl, (substituted) aryl, amino; R4 = (substituted) aryl; R5 = thiophenyl group Q, (substituted) aryl; R6 = H, halo, alkyl, alkoxy, NO2, allyl, (substituted) aryl, amino]. Thus, an Al-deposited polyester film was coated with a composition containing metal-free phthalocyanine, I (R = R3 = OMe; R1 = R2 = H; R4 = R5 = Ph), and Vylon 200 (polyester resin) to give a photoreceptor, which showed high sensitivity toward both white light and a light of 780 nm.
IT 125582-27-6 125582-36-7
RL: USES (Uses)
(charge-transporting agent, for electrophotog. photoconductor, for repeated use)
RN 125582-27-6 CAPLUS
CN Benzaldehyde, 2-methoxy-4-[5-(3-methoxyphenyl)-2-thienyl]-, (4-methoxyphenyl)(phenylmethyl)hydrazone (9CI) (CA INDEX NAME)

L19 ANSWER 206 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



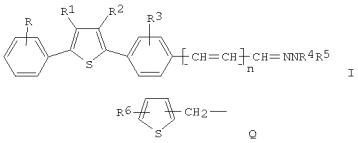
RN 125582-36-7 CAPLUS
CN Benzaldehyde, 2-ethoxy-4-[5-(3-ethoxyphenyl)-2-thienyl]-, phenyl[(5-phenyl-3-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)



L19 ANSWER 207 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:108567 CAPLUS
DOCUMENT NUMBER: 112:108567
TITLE: Electrophotographic photoreceptors containing a hydrazone charge-transporting agent
INVENTOR(S): Kuroda, Masami; Nakamura, Yoichi; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01164950 | A | 19890629 | JP 1987-323235 | 19871221 |
| PRIORITY APPLN. INFO.: | | | JP 1987-323235 | 19871221 |

GI



I



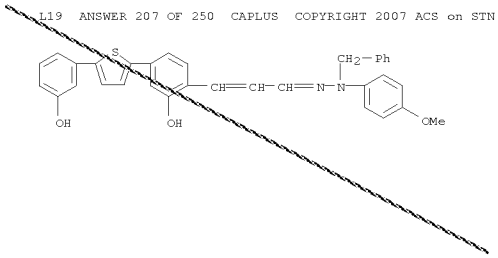
Q

AB Electrophotog. photoreceptors exhibiting good sensitivity and cyclicability have a photosensitive layer containing ≥1 hydrazones I [R, R1, R2, R3 = H, halo, alkyl, alkoxy, OH, acyl, NO2, (substituted) aryl, (substituted) amino; R4 = (substituted) aryl; R5 = (substituted) alkyl, thiophene group Q; R6 = H, halo, alkyl, alkoxy, OH, acyl, NO2, (substituted) aryl, (substituted) amino; n = 1, 2]. Thus, an Al-deposited polyester film was coated with a composition containing metal-free phthalocyanine, I (R = R1 = R2 = R3 = H; R4 = R5 = Ph; n = 1), and Vylon 200 (polyester resin) to give a photoreceptor, which showed high sensitivity toward both white light and a light of 780 nm.

IT 125582-42-5
RL: USES (Uses)
(charge-transporting agent, for electrophotog. photoconductor, for repeated use)

RN 125582-42-5 CAPLUS
CN 2-Propenal, 3-[2-hydroxy-4-[5-(3-hydroxyphenyl)-2-thienyl]phenyl]-, (4-methoxyphenyl)(phenylmethyl)hydrazone (9CI) (CA INDEX NAME)

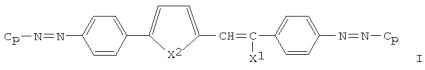
L19 ANSWER 207 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 208 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:108503 CAPLUS
DOCUMENT NUMBER: 112:108503
TITLE: Electrophotographic photoconductor layer containing bisazo compound as charge-generating substance
INVENTOR(S): Suzuki, Shinichi; Fukawa, Hiroko; Shibata, Toyoko; Takagi, Takahiro; Sasaki, Osamu
PATENT ASSIGNEE(S): Konica Co., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01179159 | A | 19890717 | JP 1988-2037 | 19880108 |
| PRIORITY APPLN. INFO.: | | | JP 1988-2037 | 19880108 |

GI



I

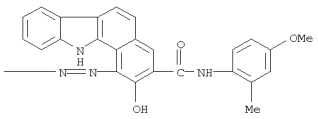
AB The photoconductor layer on an elec. conductive support contains a bisazo compound I (Cp = coupler residue; X1 = H, CN, halo; and X2 = NH, O, S) as a charge-generating substance.

IT 125501-91-9
RL: USES (Uses)
(charge-generating substance, electrophotog. photoconductor from)

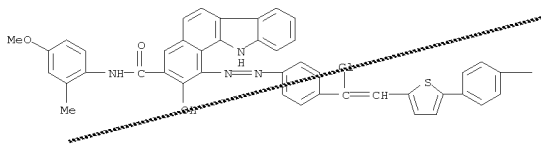
RN 125501-91-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1-[[4-[5-[2-chloro-2-[4-[[2-hydroxy-3-[[(4-methoxy-2-methylphenyl)amino]carbonyl]-11H-benzo[a]carbazol-1-yl]azo]phenyl]ethenyl]-2-thienyl]phenyl]azo]-2-hydroxy-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 208 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



PAGE 1-A



L19 ANSWER 209 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:45624 CAPLUS
DOCUMENT NUMBER: 112:45624
TITLE: Electrophotographic photoconductors containing bisazo compound charge carrier-generating agents
INVENTOR(S): Kuroda, Masami; Hattori, Yoshimasa; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 100 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 3841207 | A1 | 19890629 | DE 1988-3841207 | 19881207 |
| DE 3841207 | C2 | 19940224 | | |
| JP 01150147 | A | 19890613 | JP 1987-310508 | 19871208 |
| JP 2629752 | B2 | 19970716 | | |
| JP 01150146 | A | 19890613 | JP 1987-310509 | 19871208 |
| JP 01167759 | A | 19890703 | JP 1987-325962 | 19871223 |
| JP 07038078 | B | 19950426 | | |
| JP 01180558 | A | 19890718 | JP 1988-5138 | 19880113 |
| JP 01183664 | A | 19890721 | JP 1988-7681 | 19880118 |
| JP 2643214 | B2 | 19970820 | | |
| US 4929525 | A | 19900529 | US 1988-283060 | 19881206 |
| DE 3844602 | C2 | 19921119 | DE 1988-3844602 | 19881207 |

PRIORITY APPLN. INFO.: JP 1987-310508 A 19871208
JP 1987-310509 A 19871208
JP 1987-325962 A 19871223
JP 1988-5138 A 19880113
JP 1988-7681 A 19880118

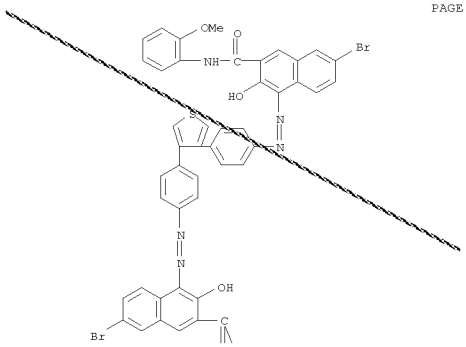
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

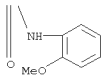
AB Electrophotog. photoconductors, having a high photosensitivity and excellent characteristics in cyclic use, contain a bisazo compound of the structure I-V (R = a coupler moiety; R1-R4 = H, halogen, OH, alkyl, alkoxy, allyl, aryl, aralkyl, CO2H, or an ester group; R5-R22 = H, CN, CO2H, ester, acyl, halogen, alkyl, cycloalkyl, alkenyl, aryl, aromatic heterocyclyl; Ar = aromatic or aromatic heterocyclyl) as a charge-generating substance. Thus, an Al-coated PET film was overcoated with a mixture containing VI, 1-phenyl-3-(p-diethylaminostyryl)-5-(p-diethylaminophenyl)oxadiazole,

L19 ANSWER 209 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
a polyester, and THF, dried, corona charged to show a surface potential of 550 V, and exposed with white light (25; 10 lx) to show a residual potential of 80 V, and an E1/2 sensitivity of 5.9 lx-s.
IT 123110-46-3 123110-56-5
RL: USES (Uses)
(electrophotog. photoconductor containing charge carrier-generating agent from, for high photosensitivity and excellent characteristics in cyclic use)
RN 123110-46-3 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[3,4-thiophenediylbis(4,1-phenyleneazo)]bis[7-bromo-3-hydroxy-N-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A

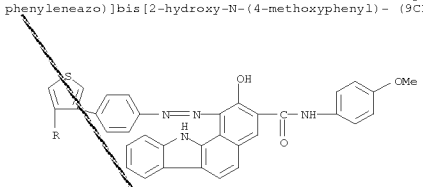


PAGE 2-A

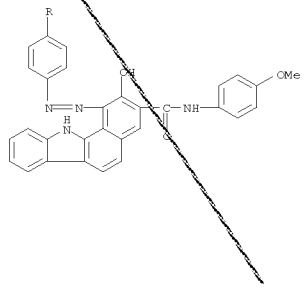


L19 ANSWER 209 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 123110-56-5 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[3,4-thiophenediylbis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L19 ANSWER 210 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:14238 CAPLUS
DOCUMENT NUMBER: 112:14238
TITLE: Electrophotogaphic photoconductor containing thiophene group-containing hydrozone as charge-transporting agent
INVENTOR(S): Kuroda, Masami; Nakamura, Youichi; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 88 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 3841391 | A1 | 19890629 | DE 1988-3841391 | 19881208 |
| JP 01152466 | A | 19890614 | JP 1987-311310 | 19871209 |
| JP 01159659 | A | 19890622 | JP 1987-317770 | 19871216 |
| JP 01166053 | A | 19890629 | JP 1987-326228 | 19871222 |
| JP 01166054 | A | 19890629 | JP 1987-326230 | 19871222 |
| JP 01172960 | A | 19890707 | JP 1987-332364 | 19871228 |
| JP 01172961 | A | 19890707 | JP 1987-332370 | 19871228 |
| JP 01172965 | A | 19890707 | JP 1987-332371 | 19871228 |
| US 4956277 | A | 19900911 | US 1988-281029 | 19881207 |

PRIORITY APPLN. INFO.: JP 1987-311310 A 19871209
JP 1987-317770 A 19871216
JP 1987-326228 A 19871222
JP 1987-326230 A 19871222
JP 1987-332364 A 19871228
JP 1987-332370 A 19871228
JP 1987-332371 A 19871228

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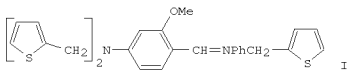
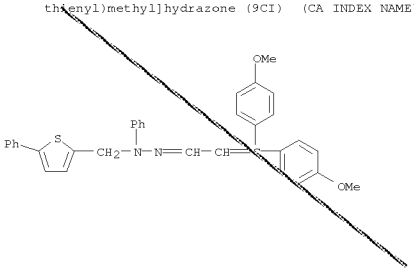


I

AB Electrophotog. photoconductors which have a high photosensitivity and excellent characteristics in cyclic use, contain a thiophene group-containing hydrazone as a charge-transporting agent. Thus, an Al-coated PET film was overcoated with a mixture containing I, metal-free phthalocyanine, Vylon 200,

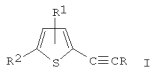
L19 ANSWER 210 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
and THF, dried, corona charged to show a surface potential of 660 V, exposed with white light to show a residual potential of 60 V and a sensitivity (Ey2) of 6.3 lx-s.
IT 124196-98-1
RL: USES (Uses)
(electrophotog. photoconductor containing charge carrier-transporting agent
from, for high sensitivity and excellent characteristics in cyclic use)
RN 124196-98-1 CAPLUS
CN 2-Propenal, 3,3-bis(4-methoxyphenyl)-, phenyl[(5-phenyl-2-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)



L19 ANSWER 211 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:2625 CAPLUS
DOCUMENT NUMBER: 112:2625
TITLE: 2-Substituted ethynylthiophene pesticides
INVENTOR(S): Eurkart, Susan E.; Phillips, Richard B.; Roush, David M.
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: U.S., 6 pp. Cont.-in-part of U.S. Ser. No. 889,040, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

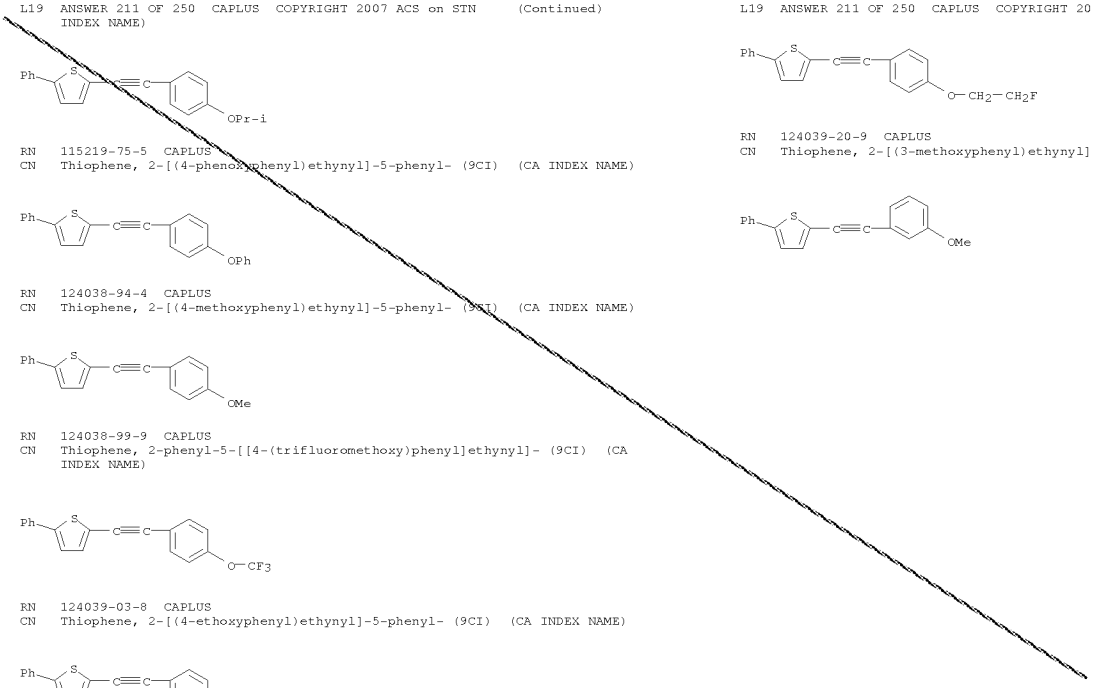
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 4826829 | A | 19890502 | US 1988-169110 | 19880309 |
| CN 87103400 | A | 19880406 | CN 1987-103400 | 19870507 |
| ZA 8705426 | A | 19880330 | ZA 1987-5426 | 19870723 |
| PRIORITY APPLN. INFO.: | | | US 1986-889040 | A2 19860723 |

OTHER SOURCE(S): CASREACT 112:2625; MARPAT 112:2625
GI



AB The ethynylthiophenes I [R, R2 = (un)substituted Ph, thienyl or naphthyl; R1 = H, Me] are prepared as acaricides and insecticides. A mixture of 5-formyl-2-phenylthiophene (preparation given) di-Et (4-chlorophenyl)chloromethylphosphonate (preparation given), DMF, and NaOMe was stirred for 18 h, to give 1-(5-phenylthien-2-yl)-2-chloro-2-(4-chlorophenyl)ethene, which was refluxed with tert-BuOK in THF, to give 1-(5-phenylthien-2-yl)-2-(4-chlorophenyl)ethyne (II). Exposure to 50 ppm II was lethal to two-spotted spider mite (Tetranychus urticae). A wettable powder contained 1-[5'-methyl-(2,2'-bithien-5-yl)]-2-[4-(1-methylethyl)phenyl]ethyne 50.0, attapulgite 22.0, kaolin 220 and Na salt of sulfonated kraft lignin 6.0%.
IT 115219-74-4P 115219-75-5P 124038-94-4P
124038-99-9P 124039-03-8P 124039-05-0P
124039-20-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as acaricide and insecticide)
RN 115219-74-4 CAPLUS
CN Thiophene, 2-[[4-(1-methylethoxy)phenyl]ethynyl]-5-phenyl- (9CI) (CA

L19 ANSWER 211 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
INDEX NAME)





RN 115219-75-5 CAPLUS
CN Thiophene, 2-[(4-phenoxyphenyl)ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)



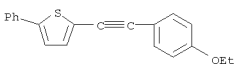
RN 124038-94-4 CAPLUS
CN Thiophene, 2-[(4-methoxyphenyl)ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)



RN 124038-99-9 CAPLUS
CN Thiophene, 2-phenyl-5-[[4-(trifluoromethoxy)phenyl]ethynyl]- (9CI) (CA INDEX NAME)



RN 124039-03-8 CAPLUS
CN Thiophene, 2-[(4-ethoxyphenyl)ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)



RN 124039-05-0 CAPLUS
CN Thiophene, 2-[[4-(2-fluoroethoxy)phenyl]ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 211 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 124039-20-9 CAPLUS
CN Thiophene, 2-[(3-methoxyphenyl)ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 212 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:622064 CAPLUS
DOCUMENT NUMBER: 111:222064
TITLE: Tetraphenylthiophene derivative and electrophotographic photoreceptor containing same
INVENTOR(S): Tanaka, Eishi; Nishizawa, Tsutomu; Yamada, Yasuyuki; Itoh, Hisato; Yamaguchi, Akihiro; Nakatsuka, Masakatsu
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Eur. Pat. Appl., 68 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 317233 | A2 | 19890524 | EP 1988-310720 | 19881114 |
| EP 317233 | A3 | 19901205 | | |
| EP 317233 | B1 | 19940504 | | |
| R: CH, DE, FR, GB, IT, LI, NL | | | | |
| JP 01280764 | A | 19891110 | JP 1988-266106 | 19881024 |
| US 4963449 | A | 19901016 | US 1988-272371 | 19881117 |
| US 5023343 | A | 19910611 | US 1990-553014 | 19900716 |

PRIORITY APPLN. INFO.: JP 1987-288311 A 19871117
JP 1987-316019 A 19871216
JP 1988-2459 A 19880111
JP 1988-3685 A 19880113
US 1988-272371 A3 19881117

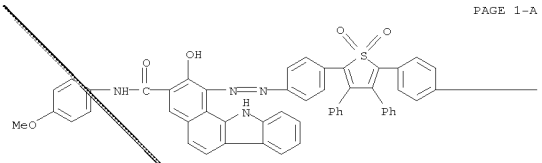
OTHER SOURCE(S): MARPAT 111:222064
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

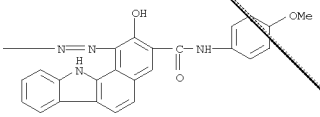
AB A tetraphenylthiophene derivative [I; R1, R2 = alkyl, aralkyl; R1 and R2 may be linked together with the N atom to form a ring; l, m, n, = 0, 1; l ≥ m ≥ n], and an electrophotog. photoreceptor with a charge-transport agent from I and a selected charge-generating agent (preferably azo) are claimed. Thus, 2,5-bis(4-aminophenyl)-3,4-diphenylthiophene and iodobenzene were reacted to obtain II. A photoreceptor containing I (R1, R2 = Ph; l = 1; m = n = 0) and II had excellent elec. properties.
IT 116372-66-8 116372-83-9 123715-41-3
RL: USES (Uses)
(as charge-generating agent in electrophotog. photoreceptor)

L19 ANSWER 212 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 116372-66-8 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(1,1-dioxido-3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



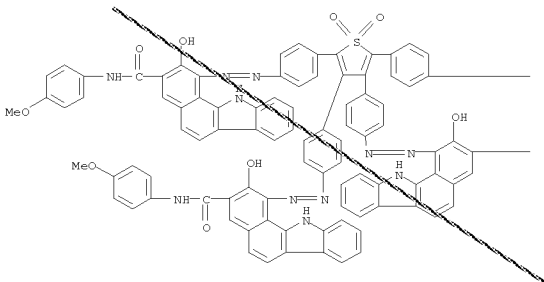
PAGE 1-B



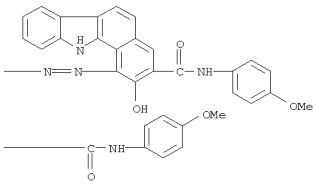
RN 116372-83-9 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 212 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



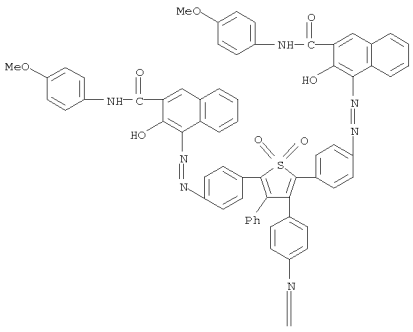
PAGE 1-B



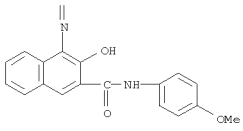
RN 123715-41-3 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4',4''-[(1,1-dioxido-4-phenyl-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 212 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

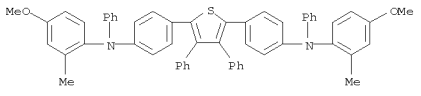
PAGE 1-A



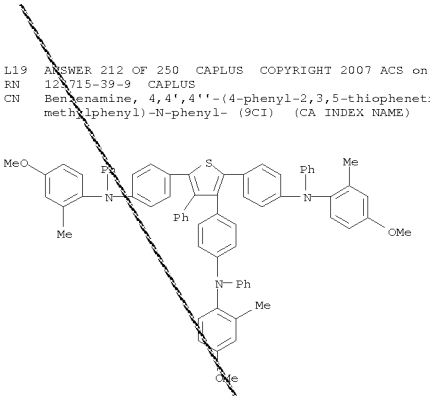
PAGE 2-A



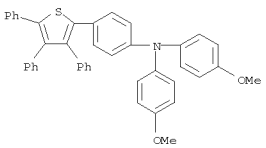
IT 123715-38-8 123715-39-9
RL: USES (Uses)
(as charge-transport agent in electrophotog. photoreceptor)
RN 123715-38-8 CAPLUS
CN Benzenamine, 4,4'-(3,4-diphenyl-2,5-thiophenediyl)bis[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



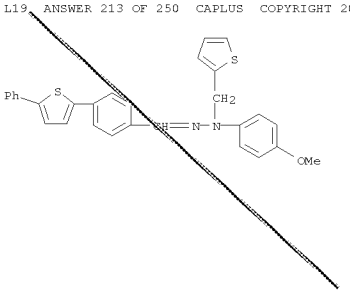
L19 ANSWER 212 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 123715-39-9 CAPLUS
CN Benzenamine, 4,4',4''-(4-phenyl-2,3,5-thiophenetriyl)tris[N-(4-methoxy-2-methylphenyl)-N-phenyl- (9CI) (CA INDEX NAME)



IT 123715-32-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as charge-transport agent in electrophotog. photoreceptor)
RN 123715-32-2 CAPLUS
CN Benzenamine, N,N-bis(4-methoxyphenyl)-4-(3,4,5-triphenyl-2-thienyl)-(9CI)
(CA INDEX NAME)



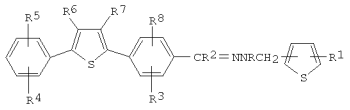
L19 ANSWER 213 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 213 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:605447 CAPLUS
DOCUMENT NUMBER: 111:205447
TITLE: Electrophotographic photoreceptors containing hydrazone compound as charge-transporting agent
INVENTOR(S): Kuroda, Masami; Nakamura, Yoichi; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 01107262 | A | 19890425 | JP 1987-265114 | 19871020 |
| PRIORITY APPLN. INFO.: | | | JP 1987-265114 | 19871020 |

GI



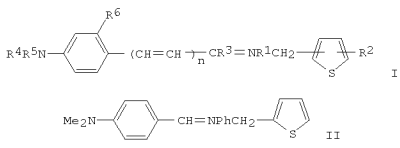
I

AB Electrophotog. photoreceptors have a photosensitive layer containing, as a charge-transporting agent, a hydrazone compound of the structure I [R = (substituted) aryl; R1-R8 = H, halo, alkoxy, alkyl, NO2, OH, aryl, (substituted) amino]. The photoreceptors exhibit good sensitivity and cyclicability. Thus, an Al-coated polyester film was coated with a composition containing metal-free phthalocyanine, I (R = Ph; R1-R8 = H), and Vylon 200 (polyester resin) to give a photoreceptor showing high sensitivity in both pos. and neg. charging.
IT 123521-25-5
RL: USES (Uses)
(charge transporting agent, for electrophotog. photoreceptor)
RN 123521-25-5 CAPLUS
CN Benzaldehyde, 4-(5-phenyl-2-thienyl)-, (4-methoxyphenyl)(2-thienylmethyl)hydrazone (9CI) (CA INDEX NAME)

L19 ANSWER 214 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:544058 CAPLUS
DOCUMENT NUMBER: 111:144058
TITLE: Hydrazone charge carrier-transporting agents for electrophotographic in photoreceptors
INVENTOR(S): Kuroda, Masami; Nakamura, Youichi; Furusho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Ger. Offen., 62 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| DE 3835108 | A1 | 19890427 | DE 1988-3835108 | 19881014 |
| DE 3835108 | C2 | 19931028 | | |
| JP 01102469 | A | 19890420 | JP 1987-260531 | 19871015 |
| JP 05024507 | B | 19930408 | | |
| JP 01107263 | A | 19890425 | JP 1987-265112 | 19871020 |
| JP 01107261 | A | 19890425 | JP 1987-265113 | 19871020 |
| JP 01107264 | A | 19890425 | JP 1987-265751 | 19871021 |
| JP 01107265 | A | 19890425 | JP 1987-265752 | 19871021 |
| JP 01152467 | A | 19890614 | JP 1987-311312 | 19871209 |
| US 4957837 | A | 19900918 | US 1988-257260 | 19881013 |
| PRIORITY APPLN. INFO.: | | | JP 1987-260531 A | 19871015 |
| | | | JP 1987-265112 A | 19871020 |
| | | | JP 1987-265113 A | 19871020 |
| | | | JP 1987-265751 A | 19871021 |
| | | | JP 1987-265752 A | 19871021 |
| | | | JP 1987-311312 A | 19871209 |

OTHER SOURCE(S): MARPAT 111:144058
GI

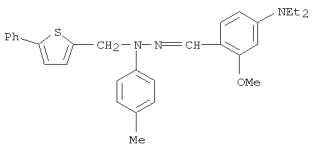


I

II

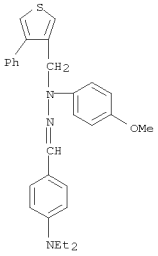
AB Electrophotog. photoreceptors having a high photosensitivity and excellent

L19 ANSWER 214 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
characteristics for continuous use contain a hydrazone of the structure I (R1 = aryl, that can have ≥1 substituent; R2-R6 = H, halogen, alkyl, alkoxy, OH, NO2, allyl, aryl, that can have ≥1 substituent, or aralkyl; n = 0 or 1) as a charge carrier-transporting agent. An Al-coated polyester film was coated with a dispersion contg. milled metal-free phthalocyanine, II, Vylon 200 (polyester), and THF, dried, and tested in an electrostatically working recording paper testing app. to show a white light photo sensitivity (E1/2 value) of 5.2 ex-s.
IT 122836-89-9 122836-99-1 122837-48-3
122837-80-3 122837-92-7 122852-22-6
RL: USES (Uses)
(electrophotog. photoreceptor containing charge carrier-transporting agent
from)
RN 122836-89-9 CAPLUS
CN Benzaldehyde, 4-(diethylamino)-2-methoxy-, (4-methylphenyl)[(5-phenyl-2-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)

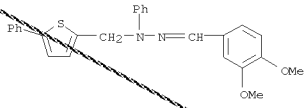


RN 122836-99-1 CAPLUS
CN Benzaldehyde, 4-(diethylamino)-, (4-methoxyphenyl)[(4-phenyl-3-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)

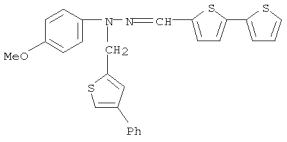
L19 ANSWER 214 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 122837-48-3 CAPLUS
CN Benzaldehyde, 3,4-dimethoxy-, phenyl[(5-phenyl-2-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)

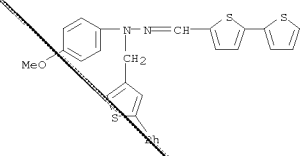


RN 122837-80-3 CAPLUS
CN [2,2'-Bithiophene]-5-carboxaldehyde, (4-methoxyphenyl)[(4-phenyl-2-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)

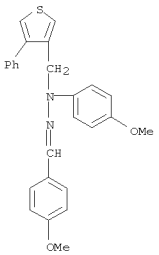


RN 122837-92-7 CAPLUS
CN [2,2'-Bithiophene]-5-carboxaldehyde, (4-methoxyphenyl)[(5-phenyl-3-

L19 ANSWER 214 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)

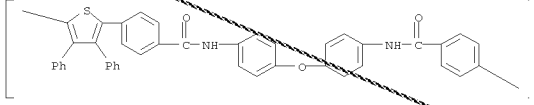


RN 122852-22-6 CAPLUS
CN Benzaldehyde, 4-methoxy-, (4-methoxyphenyl)[(4-phenyl-3-thienyl)methyl]hydrazone (9CI) (CA INDEX NAME)



L19 ANSWER 215 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:458426 CAPLUS
DOCUMENT NUMBER: 111:58426
TITLE: Soluble high-temperature polymers containing a tetraphenylthiophene unit
AUTHOR(S): Imai, Yoshio; Kakimoto, Masaaki
CORPORATE SOURCE: Dep. Org. Polym. Mater., Tokyo Inst. Technol., Tokyo, 152, Japan
SOURCE: Polymer-Plastics Technology and Engineering (1989), 28(4), 371-414
CODEN: PPTEC7; ISSN: 0360-2559
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The title polymers were prepared using 4 types tetraphenylthiophene monomers
- diamine, diisocyanate, diacyl chloride, and dibromide. Aromatic polyimides
and copolyimides were prepared by reaction of tetraphenylthiophenediamine (I) or tetraphenylthiophene diisocyanate (II) with tetracarboxylic dianhydrides or dithioanhydrides. Aromatic polyamides and copolyamides were
obtained by reaction of I with diacyl chlorides or tetraphenylthiophenedicarboxylic acid chloride (III) with diamines. Aromatic
polyamide-imides were prepared by reaction of I with 4-chloroformylphthalic
anhydride and of II with trimellitic anhydride. The reaction of III with bisphenols and aminophenols gave aromatic polyesters and polyamide-esters,
resp. Aromatic polyazomethines were prepared by reaction of I and aldehydes.
All the polymers had high mol. weight, were soluble in organic solvents, and had
glass transition temps. of .apprx.300°.
IT 97429-39-5P 104909-92-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and solubility and glass transition temperature of)
RN 97429-39-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A

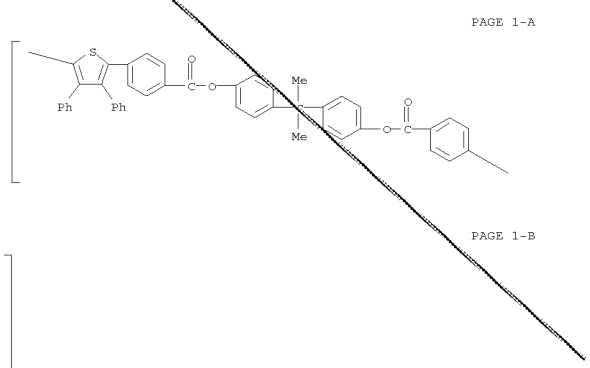


L19 ANSWER 215 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

RN 104909-92-4 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

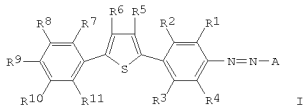


L19 ANSWER 216 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

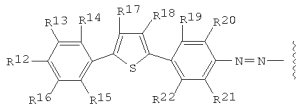
ACCESSION NUMBER: 1989:222531 CAPLUS
DOCUMENT NUMBER: 110:222531
TITLE: Charge-generating azo photoconductor for electrophotographic plate
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

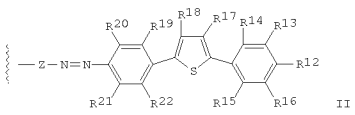
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63163369 | A | 19880706 | JP 1986-313501 | 19861225 |
| PRIORITY APPLN. INFO.: | | | JP 1986-313501 | 19861225 |

OTHER SOURCE(S): MARPAT 110:222531
GI



I





II

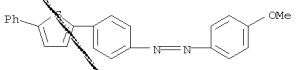
AB The electrophotog. plate with improved sensitivity and stability has a photosensitive layer containing as a charge-generating photoconductor ≥

L19 ANSWER 216 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

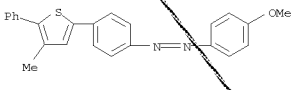
1 phenylthienylphenylazo deriv. of the formula I or phenylthienylphenyldisazo deriv. of the formula II (R1-R22 = H, halo, OH, alkyl, alkoxy, allyl, acyl, carbamoyl, amino, aryl, NO2, CN, etc.; A = coupler residue which may be benzene deriv.; Z = [1,1'-biphenyl]-4,4'-diyl deriv.). The compd. (I; R1-R11 = H; A = 3-nitrophenyl) may be used as a charge-generating photoconductor for the electrophotog. plate.

IT 120565-91-5 120565-98-2 120566-05-4
RL: USES (Uses)
(electrophotog. charge-generating photoconductor, for improved sensitivity)

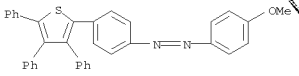
RN 120565-91-5 CAPLUS
CN Diazene, (4-methoxyphenyl)[4-(5-phenyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



RN 120565-98-2 CAPLUS
CN Diazene, (4-methoxyphenyl)[4-(4-methyl-5-phenyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)



RN 120566-05-4 CAPLUS
CN Diazene, (4-methoxyphenyl)[4-(3,4,5-triphenyl-2-thienyl)phenyl]- (9CI) (CA INDEX NAME)

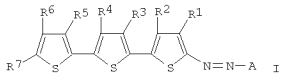


L19 ANSWER 217 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

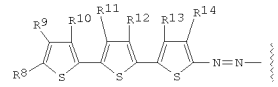
ACCESSION NUMBER: 1989:222530 CAPLUS
DOCUMENT NUMBER: 110:222530
TITLE: Charge-generating terthienylazo or terthienyldisazo photoconductor for electrophotographic plate
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

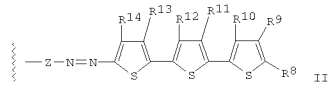
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63163368 | A | 19880706 | JP 1986-313500 | 19861225 |
| PRIORITY APPLN. INFO.: | | | JP 1986-313500 | 19861225 |

OTHER SOURCE(S): MARPAT 110:222530
GI



I



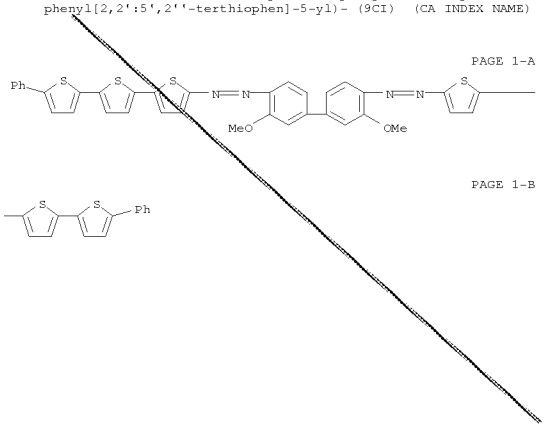


II

AB The electrophotog. plate with improved sensitivity and stability has a photosensitive layer containing as a charge-generating photoconductor ≥ 1 terthienylazo derivative of the formula I or terthienyldisazo derivative of the formula II (R1-R14 = H, halo, OH, alkyl, alkoxy, allyl, acyl, carbamoyl, amino, aryl, NO2, CN, etc.; A = coupler residue which may be benzene derivative; Z = [1,1'-biphenyl]-4,4'-diyl derivative). The compound (I; R1-R7 = H; A = 3-nitrophenyl) may be used as a charge-generating photoconductor for the electrophotog. plate.

IT 120607-25-2
RL: USES (Uses)
(electrophotog. charge-generating photoconductor, for improved sensitivity)

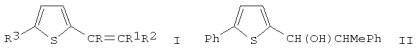
L19 ANSWER 217 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
RN 120607-25-2 CAPLUS
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5''-phenyl[2,2':5',2''-terthiophen]-5-yl)- (9CI) (CA INDEX NAME)




L19 ANSWER 218 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:154135 CAPLUS
DOCUMENT NUMBER: 110:154135
TITLE: Preparation of acaricidal aryl(arylthien-2-yl)ethenes
INVENTOR(S): Burkart, Susan E.; Rodriguez, Cesar; Roush, David M.; Phillips, Richard B.
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

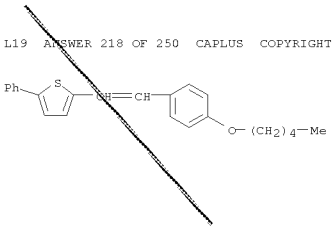
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| US 4792567 | A | 19881220 | US 1987-60188 | 19870609 |
| PRIORITY APPLN. INFO.: | | | US 1987-60188 | 19870609 |

OTHER SOURCE(S): CASREACT 110:154135; MARPAT 110:154135
GI




AB The title compds. [I; R,R1 = H, halo, alkyl, alkoxycarbonyl, N(CO2Et)CH2C6H11; R2,R3 = (un)substituted Ph, thienyl; 1 of R2,R3 ≠ Ph, alkylphenyl] were prepared 2-Bromothiophene was refluxed with PhMgBr in Et2O containing (Ph2PCH2)2CH2-NiCl2 to give 2-phenylthiophene which was stirred 2 h at -78° with BuLi in THF after which PhCHMeCHO was added and the mixture stirred 2 days at room temperature to give thienylpropanol II. The latter was refluxed 1.5 h with concentrated HCl to give I (R1 = Me, R2 = R3 = Ph) which gave 86 and 100% kill of phosphate-resistant and nonresistant Tetranychus urticae, resp., when sprayed at 50 ppm and maintained 48 h under UV light.
IT 119895-20-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as acaricide)
RN 119895-20-4 CAPLUS
CN Thiophene, 2-[2-[4-(pentyloxy)phenyl]ethenyl]-5-phenyl- (9CI) (CA INDEX NAME)

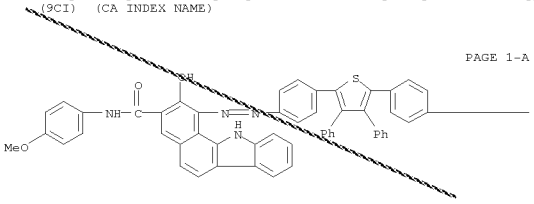
L19 ANSWER 218 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 219 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:144959 CAPLUS
DOCUMENT NUMBER: 110:144959
TITLE: Electrophotographic photoreceptors containing hydrazone as charge-transporting substance
INVENTOR(S): Yamada, Yasuyuki; Ito, Naoto; Nishizawa, Isao; Yamaguchi, Teruhiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

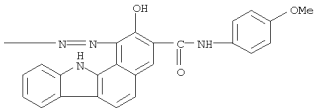
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63206758 | A | 19880826 | JP 1987-39132 | 19870224 |
| PRIORITY APPLN. INFO.: | | | JP 1987-39132 | 19870224 |

OTHER SOURCE(S): MARPAT 110:144959
AB Electrophotog. photoreceptors have, on a conductive support, a photo-sensitive layer containing a hydrazone of the formula PhN(C6H4CH:NNRR1-p)2 [I; R, R1 = (substituted) alkyl, (substituted) aralkyl, (substituted) aryl; ≥1 of them should be a (substituted) aryl] as a charge-transporting substance. The photoreceptors exhibit good sensitivity and durability. Thus, an Al substrate was coated with a composition containing a disazo compound and Vylon 200 (polyester resin) and overcoated with a composition containing I (R = Ph; R1 = Me) and Vylon 200 to give a photoreceptor which showed high sensitivity and excellent durability.
IT 116372-51-1
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-generating agent, for electrophotog. photoreceptor)
RN 116372-51-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



L19 ANSWER 219 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

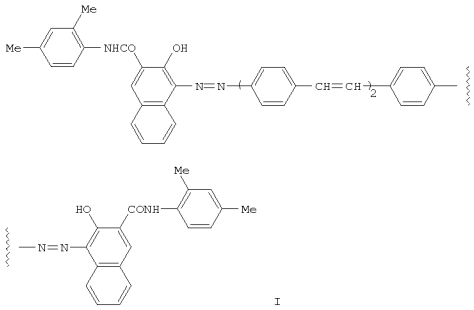


L19 ANSWER 220 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:104968 CAPLUS
DOCUMENT NUMBER: 110:104968
TITLE: Electrophotographic photoreceptors with insulating layer and photosensitive layer on phenol resin substrate containing dispersed carbon
INVENTOR(S): Asanuma, Tadashi; Takeda, Junko; Tokura, Yoshiko
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63180963 | A | 19880726 | JP 1987-11231 | 19870122 |
| PRIORITY APPLN. INFO.: | | | JP 1987-11231 | 19870122 |

GI



AB Electrophotog. photoreceptors, having at least a charge-generating layer and a charge-transporting layer, are prepared by forming an insulating layer on a phenol resin substrate in which carbon is dispersed and then forming a charge-generating layer containing >50 weight% azo type pigment thereon. The

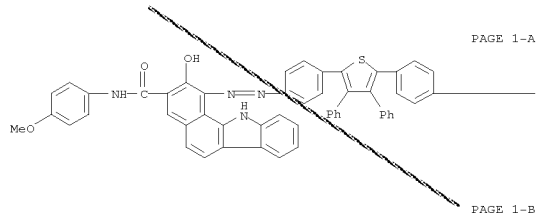
L19 ANSWER 220 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

photoreceptors exhibit good sensitivity and durability and are useful for copiers, laser printers and the like. Thus, a hardened resol type phenol resin substrate in which carbon (20 wt.%) was dispersed was first coated with casein, then coated with a compn. contg. azo pigment I and Vylon 200 (polyester resin) (2:1 wt. ratio), and finally coated with a compn. contg. a hydrazone compd. and Vylon 200 to give an electrophotog. photoreceptor.

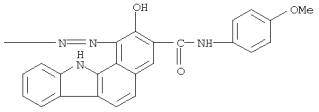
IT 116372-51-1
RL: USES (Uses)
(charge-generating agent, electrophotog. photoreceptor containing)

RN 116372-51-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

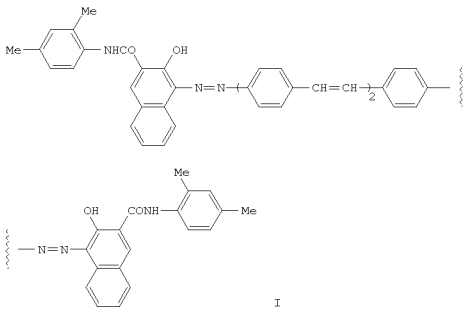


L19 ANSWER 221 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1989:104961 CAPLUS
DOCUMENT NUMBER: 110:104961
TITLE: Electrophotographic photoreceptors with charge-generating layer prepared from dispersion of azo-type pigments in alkylglycol acetate media
INVENTOR(S): Asanuma, Tadashi; Takeda, Junko; Tokura, Yoshiko
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63172276 | A | 19880715 | JP 1987-3354 | 19870112 |
| PRIORITY APPLN. INFO.: | | | JP 1987-3354 | 19870112 |

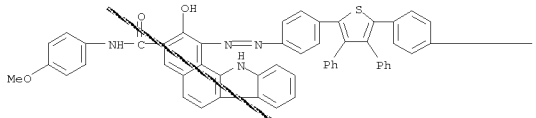
GI



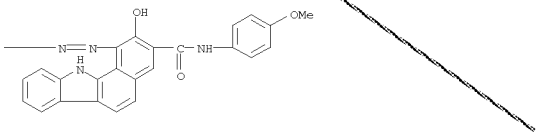
AB Electrophotog. photoreceptors comprise a charge-transporting layer and ≥1 charge-generating layer prepared by coating an azo-type pigment dispersion in an alkylglycol acetate medium. The photoreceptors exhibit high sensitivity and durability, and are useful for electrophotog. copiers, laser printers, etc. Thus, an Al substrate was coated with a composition containing I (diazo pigment), Rikemal S-100 (stearic acid monoglyceride), Vylon 200 (polyester resin), and cellosolve acetate and overcoated with a composition containing a charge-transporting material and Vylon

L19 ANSWER 221 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
200. The photoreceptor showed high sensitivity at a wide range in wavelength.
IT 116372-51-1
RL: TEM (Technical or engineered material use); USES (Uses)
(charge-generating agent, for electrophotog. photoreceptor)
RN 116372-51-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A



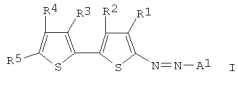
PAGE 1-B



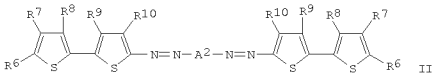
L19 ANSWER 222 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:85429 CAPLUS
DOCUMENT NUMBER: 110:85429
TITLE: Organic electrophotographic photoconductors
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63158563 | A | 19880701 | JP 1986-306872 | 19861223 |
| PRIORITY APPLN. INFO.: | | | JP 1986-306872 | 19861223 |

GI



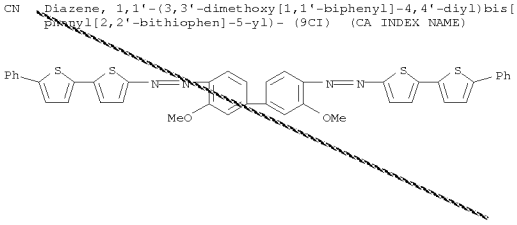
I



II

AB The photosensitive layer of electrophotog. photoconductors contains azo bithiophene compd(s)., (I) or (II) [R1-10 = H, halo, OH, alkyl, alkoxy, allyl, aldehydo, acyl, carboxy, ester group, carbamoyl, NH2, alkylamino, arylamino, aryl, aralkyl, NO2, cyano; N:NA1 = azo-containing group; N:NA2N:N = bisazo-containing group], as charge carrier-generating agent. The use of I provides high sensitivity and stability, and excellent performance when combined with varied charge carrier-generating agents. Thus, a dispersion containing I (R1-5 = H, A1 = 3-nitrophenyl) 50, 1-phenyl-3-(p-diethylaminostyryl)-(p-diethylaminophenyl)-2-pyrazoline 100, and polyester 100 parts was applied on an Al-coated polyester film. The obtained photoconductor showed sensitivity (irradiation required for half decay of charge voltage) 5.1 lx-s to white light.
IT 119024-74-7
RL: USES (Uses)
(electrophotog. photoconductor containing, as charge carrier-generating

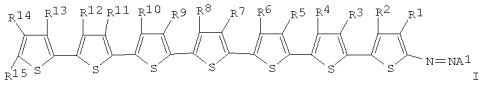
L19 ANSWER 222 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
agent)
RN 119024-74-7 CAPLUS
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5'-phenyl[2,2'-bithiophen]-5-yl)- (9CI) (CA INDEX NAME)



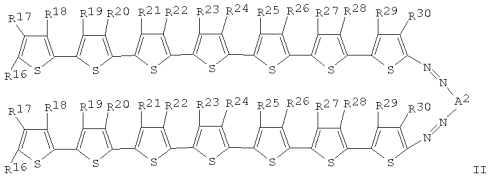
L19 ANSWER 223 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:85395 CAPLUS
DOCUMENT NUMBER: 110:85395
TITLE: Electrophotographic photoreceptor having photosensitive layer containing septithiophene structure-containing azo derivative
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63178246 | A | 19880722 | JP 1987-10434 | 19870120 |
| PRIORITY APPLN. INFO.: | | | JP 1987-10434 | 19870120 |

GI



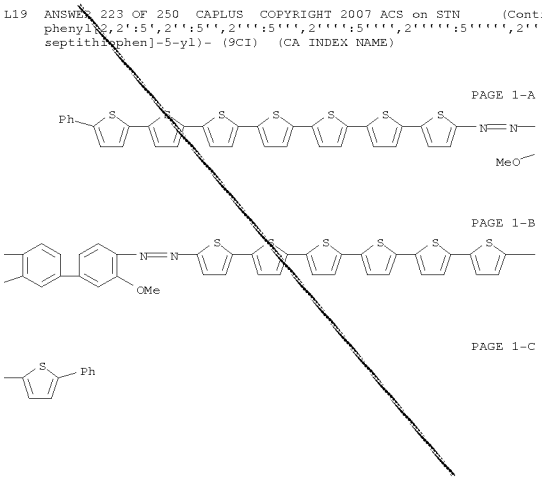
I



II

AB The title photoreceptor has a photosensitive layer containing ≥1 septithiophene structure-containing azo derivative I or II [R1-R30 = H, halogen, OH, alkyl, alkoxy, allyl, aldehyde, acyl, carboxyl, ester, carbamoyl, amino, alkylamino, arylamino, aryl, aralkyl, nitro, cyano; N:NA' = azo moiety; N:NA2N:N indicates a bisazo moiety]. An electrophotog. photoreceptor containing the azo derivative as a charge-generating material shows improved electrophotog. performance.
IT 118155-16-1
RL: USES (Uses)
(charge-generating material, electrophotog. photoreceptor using)
RN 118155-16-1 CAPLUS
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5''''''-

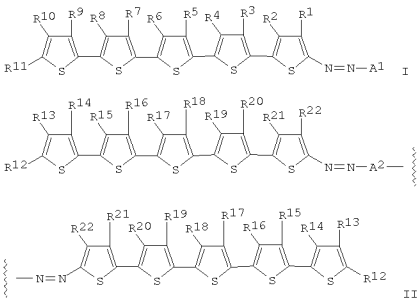
L19 ANSWER 223 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
phenyl]-2,2':5',2'':5'',2''':5''',2'''':5'''',2''''':5''''',2'''''':5'''''',2''''''-septithiophen]-5-yl)- (9CI) (CA INDEX NAME)




L19 ANSWER 224 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:85392 CAPLUS
DOCUMENT NUMBER: 110:85392
TITLE: Electrophotographic photoreceptor having photosensitive layer containing quninquethiophene azo derivative
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

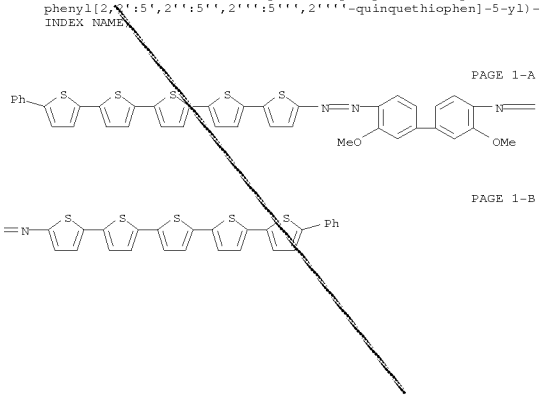
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63170653 | A | 19880714 | JP 1987-2724 | 19870109 |
| PRIORITY APPLN. INFO.: | | | JP 1987-2724 | 19870109 |

OTHER SOURCE(S): MARPAT 110:85392
GI




AB The title photoreceptor has a photosensitive layer containing ≥1 quinquethiophene azo derivative of the structure I or II [R1-R22 = H, halogen, OH, alkyl, alkoxy, allyl, aldehydo, acyl, CO2H, ester, carbamoyl, NH2, alkylamino, arylamino, aryl, aralkyl, NO2, CN; A1 = a coupler moiety; and

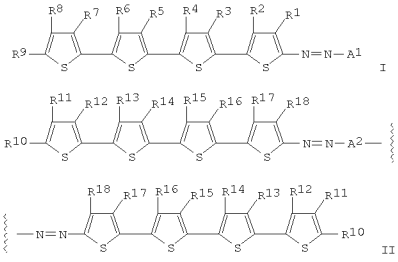
L19 ANSWER 224 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
A2 = a divalent coupler moiety]. This azo deriv. may be used as a charge-generating material. An electrophotog. photoreceptor using this azo deriv. shows both improved neg. and pos. chargeabilities with improved sensitivity.
IT 118882-03-4
RL: USES (Uses)
(charge-generating material, electrophotog. photoreceptor using)
RN 118882-03-4 CAPLUS
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5''''-phenyl[2,2':5',2'':5'',2''':5''',2''''-quinquethiophen]-5-yl)- (9CI) (CA INDEX NAME)




L19 ANSWER 225 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:85391 CAPLUS
DOCUMENT NUMBER: 110:85391
TITLE: Electrophotographic photoreceptor having photosensitive layer containing terthiophene azo derivative
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 63170652 | A | 19880714 | JP 1987-2723 | 19870109 |
| PRIORITY APPLN. INFO.: | | | JP 1987-2723 | 19870109 |

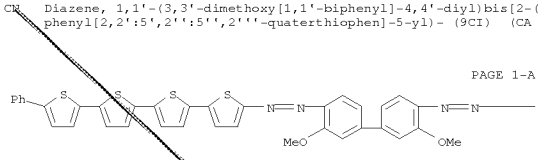
OTHER SOURCE(S): MARPAT 110:85391
GI



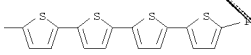

AB The title photoreceptor has a photosensitive layer containing ≥1 terthiophene azo derivative of the structures I or II [R1-R18 = H, halogen, OH, alkyl, alkoxy, allyl, aldehydo, acyl, CO2H, ester, carbamoyl, NH2, alkylamino, arylamino, aryl, aralkyl; A1 = a coupler moiety; A2 = a divalent moiety]. This azo derivative may be used as a charge-generating material. An electrophotog. photoreceptor using this azo derivative shows both improved neg. and pos. chargeabilities with improved durability and sensitivity.
IT 118881-43-9
RL: USES (Uses)
(charge-generating material, electrophotog. photoreceptor using)
RN 118881-43-9 CAPLUS

L19 ANSWER 225 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5'''-phenyl[2,2':5',2'':5'',2'''-quaterthiophen]-5-yl)- (9CI) (CA INDEX NAME)

PAGE 1-A



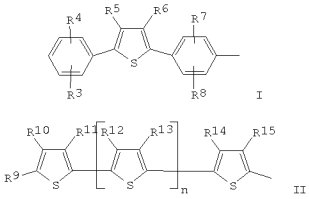
PAGE 1-B



L19 ANSWER 226 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:66857 CAPLUS
DOCUMENT NUMBER: 110:66857
TITLE: Electrophotographic photoreceptor having photosensitive layer containing hydrazone derivative
INVENTOR(S): Kuroda, Masami; Nakamura, Yoichi; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

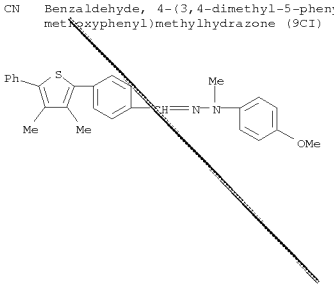
| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| JP 63183448 | A | 19880728 | JP 1987-16764 | | 19870127 |
| US 4861691 | A | 19890829 | US 1987-137212 | | 19871222 |
| PRIORITY APPLN. INFO.: | | | JP 1986-305652 | A | 19861222 |
| | | | JP 1986-310176 | A | 19861229 |
| | | | JP 1987-16764 | A | 19870127 |

OTHER SOURCE(S): MARPAT 110:66857
GI



AB The title photoreceptor has a photosensitive layer containing ≥1 hydrazone derivative XCH:NNR1R2 [R1,R2 = (substituted) alkyl, (substituted) aryl, (substituted) aralkyl; X = I or II (R3-R15 = H, halogen, OH, alkyl, alkoxy, allyl, carboxyl, acyl, ester, aryl, cyano, nitro, amino, alkylamino, arylamino; n = 1-5)]. This hydrazone derivative is suited for use as a charge-transporting material. An electrophotog. photoreceptor using this hydrazone derivative shows improved pos. and neg. chargeability with improved sensitivity and durability.

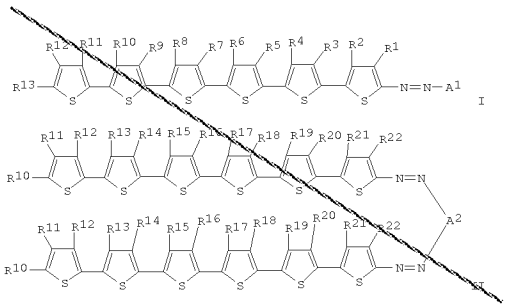
L19 ANSWER 226 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 118163-66-9
RL: USES (Uses)
(charge-transporting material, electrophotog. photoreceptor using)
RN 118163-66-9 CAPLUS
CN Benzaldehyde, 4-(3,4-dimethyl-5-phenyl-2-thienyl)-, (4-methoxyphenyl)methylhydrazone (9CI) (CA INDEX NAME)



L19 ANSWER 227 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1989:31369 CAPLUS
DOCUMENT NUMBER: 110:31369
TITLE: Electrophotographic photoreceptor having photosensitive layer containing sexithiophene structure-containing azo derivative
INVENTOR(S): Nakamura, Yoichi; Kuroda, Masami; Kosho, Noboru
PATENT ASSIGNEE(S): Fuji Electric Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| JP 63178245 | A | 19880722 | JP 1987-10433 | | 19870120 |
| PRIORITY APPLN. INFO.: | | | JP 1987-10433 | | 19870120 |

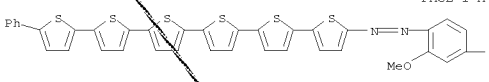
OTHER SOURCE(S): MARPAT 110:31369
GI



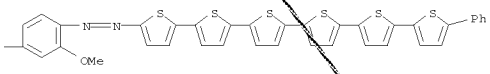
AB The title photoreceptor has a photosensitive layer containing ≥1 sexithiophene structure-containing azo derivative I or II [R1-R22 = H, halogen, OH, alkyl, alkoxy, allyl, aldehyde, acyl, carboxyl, ester, carbamoyl, amino, alkylamino, arylamino, aryl, aralkyl, nitro, cyano; N:NA' = azo residue; N:NA2N:N = bisazo residue]. An electrophotog. photoreceptor containing the azo derivative shows improved sensitivity and durability.
IT 118154-28-2
RL: USES (Uses)
(charge-generating material, electrophotog. photoreceptor using)
RN 118154-28-2 CAPLUS
CN Diazene, 1,1'-(3,3'-dimethoxy[1,1'-biphenyl]-4,4'-diyl)bis[2-(5'''''-phenyl[2,2':5',2'':5'',2''':5''',2'''':5'''',2'''''-sexithiophen]-5-yl)- (9CI) (CA INDEX NAME)

L19 ANSWER 227 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



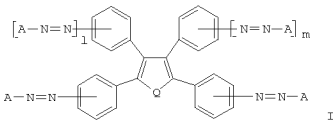
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:519596 CAPLUS
DOCUMENT NUMBER: 109:119596
TITLE: Electrophotographic photoreceptor containing azo compound with tetraphenylthiophene or tetraphenylthiophene-1,1-dioxide skeleton
INVENTOR(S): Yamada, Yasuyuki; Itoh, Hisato; Nishizawa, Tsutomu; Yamaguchi, Akihiro
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: PCT Int. Appl., 86 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 8707736 | A1 | 19871217 | WO 1987-JP353 | 19870604 |
| W: JP, KR, US | | | | |
| RW: CH, DE, FR, GB, IT, NL | | | | |
| EP 270685 | A1 | 19880615 | EP 1987-903740 | 19870604 |
| EP 270685 | B1 | 19940907 | | |
| R: CH, DE, FR, GB, IT, LI, NL | | | | |
| CA 1302767 | C | 19920609 | CA 1987-538844 | 19870604 |
| JP 05057581 | B | 19930824 | JP 1987-503388 | 19870604 |
| US 4808503 | A | 19890228 | US 1987-110757 | 19870828 |
| JP 04211266 | A | 19920803 | JP 1991-48644 | 19910222 |
| JP 05053266 | B | 19930809 | | |

PRIORITY APPLN. INFO.: JP 1986-129082 A 19860605
WO 1987-JP353 W 19870604

GI



I

AB An electrophotog. photoreceptor having high sensitivity and excellent durability is comprised of a photosensitive layer containing ≥1 of azo compds. having a tetraphenylthiophene or tetraphenylthiophene-1,1-dioxide skeleton as a charge-generating substance. The preferable azo compds. are represented by I [A = coupler moiety; Q = S, SO2; l, m = 1, 0].

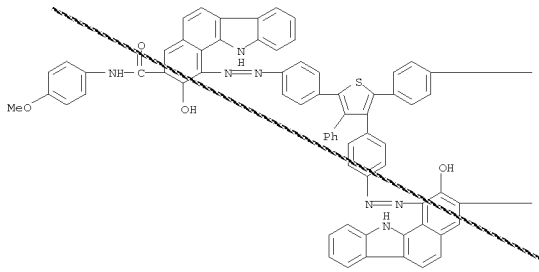
IT 116352-36-4 116352-45-5 116372-87-3 116372-93-1 116372-98-6 116373-01-4

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

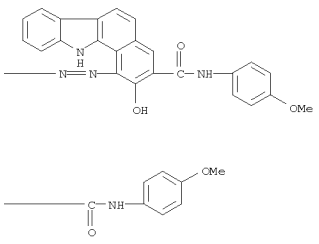
RL: USES (Uses)
(charge-generating substance, for electrophotog. photoreceptor)

RN 116352-36-4 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1''-[(4-phenyl-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



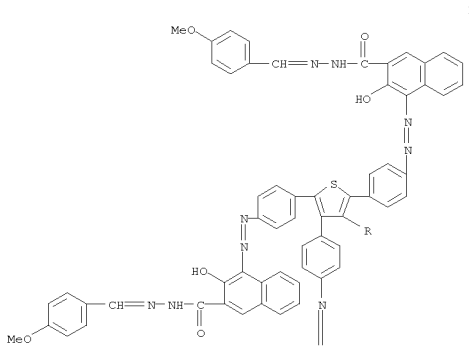
PAGE 1-B



RN 116352-45-5 CAPLUS
CN 2-Naphthalenecarboxylic acid, 4,4',4'',4'''-[2,3,4,5-thiophenetetrayltetrakis(4,1-phenyleneazo)]tetrakis[3-hydroxy-, tetrakis[[(4-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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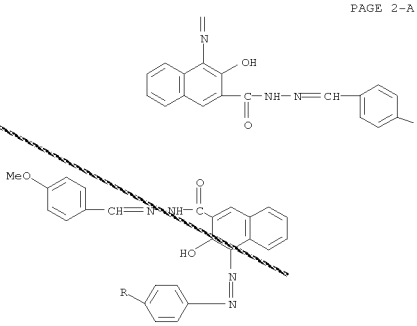


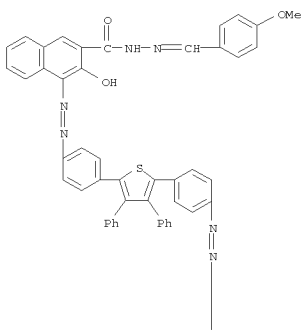
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-B



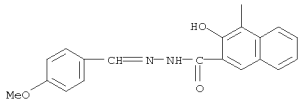
RN 116372-87-3 CAPLUS
CN 2-Naphthalenecarboxylic acid, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-, bis[[(4-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A



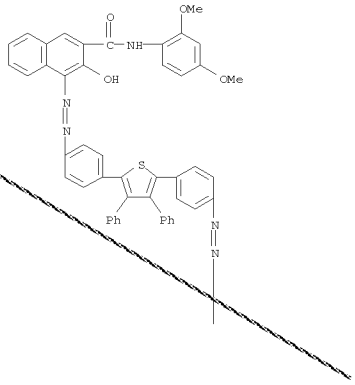
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A



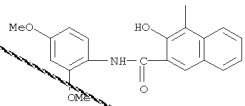
RN 116372-93-1 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[N-(2,4-dimethoxyphenyl)-3-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



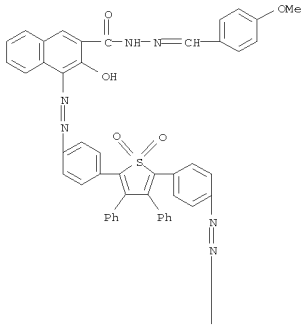
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

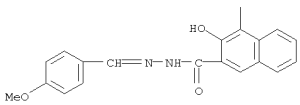


RN 116372-98-6 CAPLUS
CN 2-Naphthalenecarboxylic acid, 4,4'-[(5,5-dioxido-3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-, bis[[(4-methoxyphenyl)methylene]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A



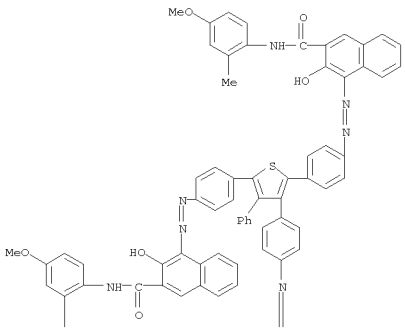
PAGE 2-A



RN 116373-01-4 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4',4''-[(4-phenyl-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[3-hydroxy-N-(4-methoxy-2-methylphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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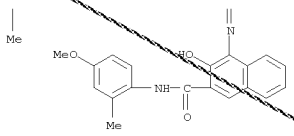
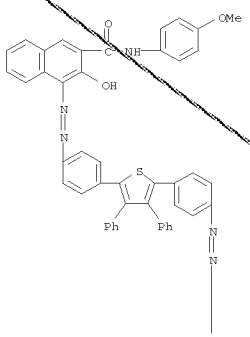


IT 108041-53-8P 116372-51-1P 116372-55-5P
116372-58-8P 116372-66-8P 116372-70-4P
116372-78-2P 116372-83-9P 116400-56-7P
116400-58-9P 116400-59-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as charge-generating substance for electrophotog.
photoreceptor)
RN 108041-53-8 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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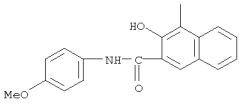
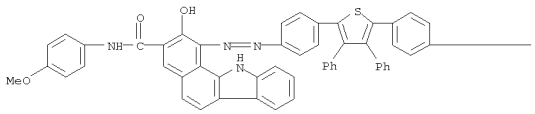


RN 116372-51-1 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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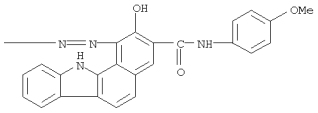
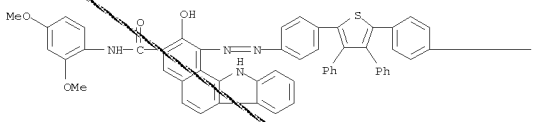
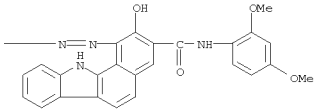


RN 116372-55-5 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[N-(2,4-dimethoxyphenyl)-2-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-A



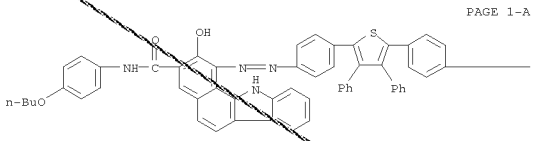
PAGE 1-B



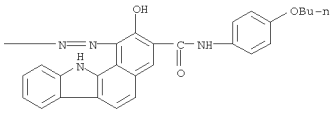
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 116372-58-8 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[N-(4-butoxyphenyl)-2-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-A

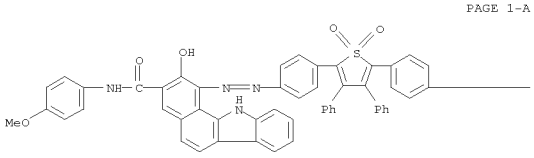


PAGE 1-B



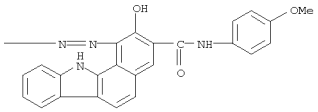
RN 116372-66-8 CAPLUS
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1'-[(1,1-dioxido-3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A



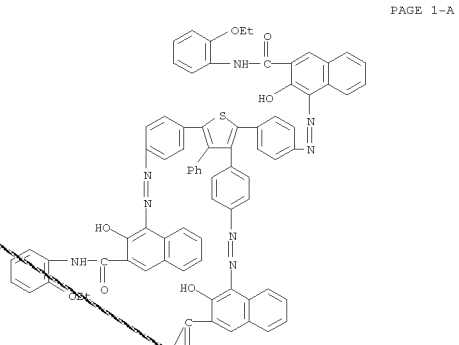
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



RN 116372-70-4 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4',4''-[(4-phenyl-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[N-(2-ethoxyphenyl)-3-hydroxy-(9CI) (CA INDEX NAME)

PAGE 1-A



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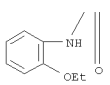
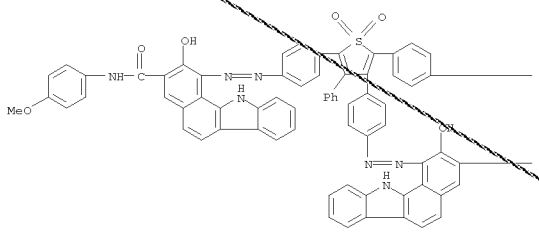


RN 116372-78-2 CAPLUS

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-(1,1-dioxido-4-phenyl-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[2-hydroxy-N-(4-methoxyphenyl)-(9CI) (CA INDEX NAME)

PAGE 1-A



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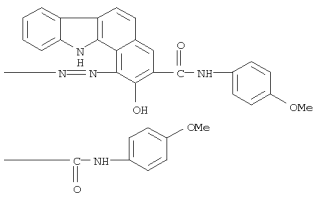
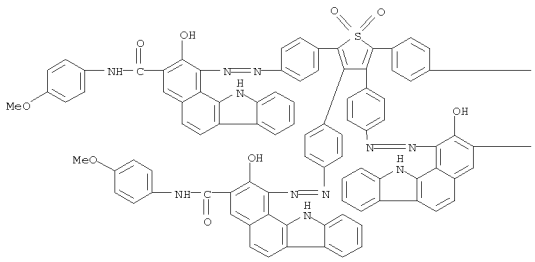


RN 116372-83-9 CAPLUS

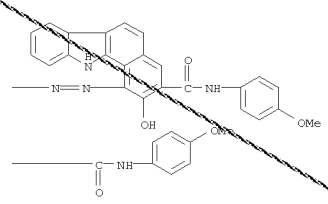
CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[(1,1-dioxido-2,3,4,5-thiophenetetrayl)tetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B

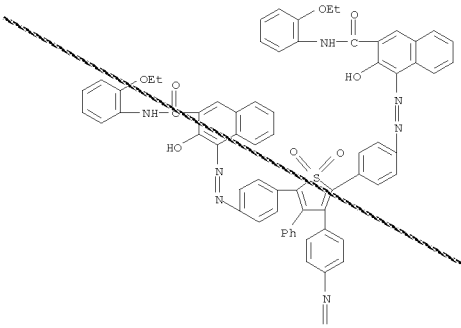


RN 116400-56-7 CAPLUS

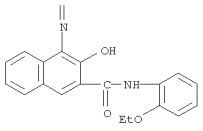
CN 2-Naphthalenecarboxamide, 4,4',4''-[(4-phenyl-1,1-dioxido-2,3,5-thiophenetriyl)tris(4,1-phenyleneazo)]tris[N-(2-ethoxyphenyl)-3-hydroxy-(9CI) (CA INDEX NAME)

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A

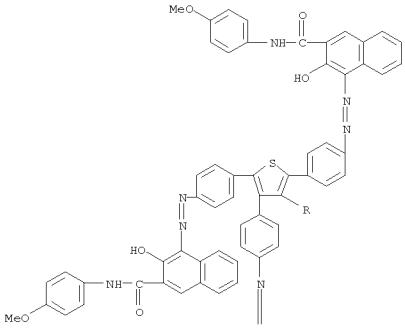


RN 116400-58-9 CAPLUS

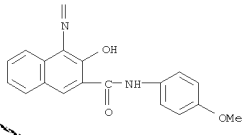
CN 2-Naphthalenecarboxamide, 4,4',4'',4'''-[2,3,4,5-thiophenetetrayltetrakis(4,1-phenyleneazo)]tetrakis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

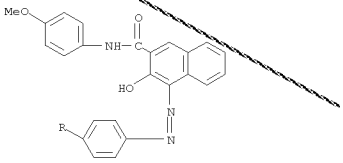
L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



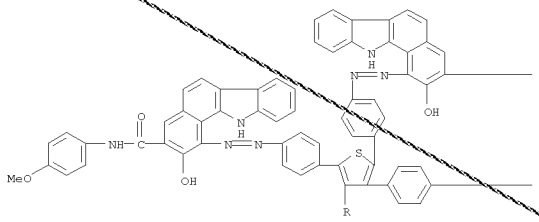


RN 116400-59-0 CAPLUS

CN 11H-Benzo[a]carbazole-3-carboxamide, 1,1',1'',1'''-[2,3,4,5-thiophenetetrayltetrakis(4,1-phenyleneazo)]tetrakis[2-hydroxy-N-(4-

L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
methoxyphenyl)- (9CI) (CA INDEX NAME)

PAGE 1-A



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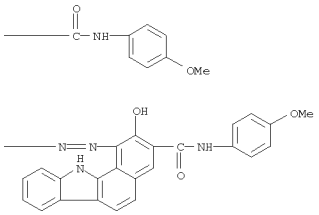
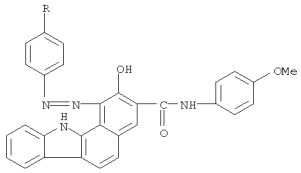


L19 ANSWER 228 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

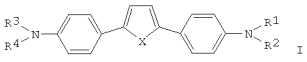


L19 ANSWER 229 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1988:483322 CAPLUS
DOCUMENT NUMBER: 109:83322
TITLE: Composite organic electrophotographic photoconductor
INVENTOR(S): Takiguchi, Takao; Matsumoto, Masakazu; Kikuchi, Norihiro
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

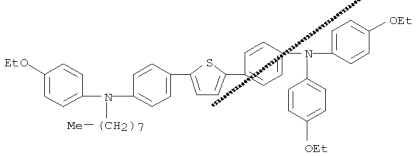
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 62264055 | A | 19871117 | JP 1986-106752 | 19860512 |
| JP 07120054 | B | 19951220 | | |
| PRIORITY APPLN. INFO.: | | | JP 1986-106752 | 19860512 |

GI



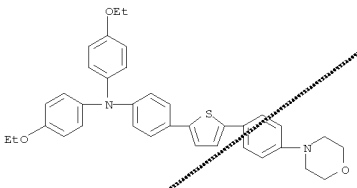
I

AB A durable electrophotog. plate is claimed which comprises a composite layer consisting of a carrier-generating sublayer and a carrier-transporting sublayer, wherein the carrier-transporting layer contains a compound I (R1, R2, R3, R4 = (ar)alkyl, aryl, heterocyclic group;
X = O, S, N bonded to (ar)alkyl, aryl, heterocyclic group).
IT 114527-43-4 114527-45-6
RL: USES (Uses)
(carrier-transporting layer containing, for electrophotog. photoconductor)
RN 114527-43-4 CAPLUS
CN Benzenamine, 4-[5-[4-[bis(4-ethoxyphenyl)amino]phenyl]-2-thienyl]-N-(4-ethoxyphenyl)-N-octyl- (9CI) (CA INDEX NAME)



RN 114527-45-6 CAPLUS
CN Benzenamine, N,N-bis(4-ethoxyphenyl)-4-[5-[4-(4-morpholinyl)phenyl]-2-

L19 ANSWER 229 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thienyl]- (9CI) (CA INDEX NAME)

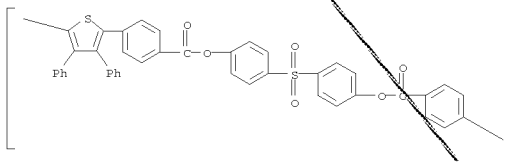


L19 ANSWER 230 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:455343 CAPLUS
DOCUMENT NUMBER: 109:55343
TITLE: Synthesis and characterization of aromatic polyesters containing tetraphenylthiophene unit
AUTHOR(S): Negi, Y. S.; Imai, Y.; Kakimoto, M.
CORPORATE SOURCE: Cent. Mater. Sci. Technol., Indian Inst. Technol., Delhi, 110 016, India
SOURCE: Journal of Polymer Materials (1988), 5(1), 67-71
CODEN: JOPME8; ISSN: 0970-0838
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Tetraphenylthiophene-based polyesters were prepared by phase-transfer polycondensation of 2,5-bis(4-chloroformylphenyl)-3,4-diphenylthiophene with 3-(4-hydroxyphenyl)-1,1,3-trimethyl-5-indanol, 4,4'-sulfonyldiphenol, or 4,4'-biphenol. The polymers were characterized by IR, NMR, and inherent viscosity measurements. All polymers showed high decomposition temps. (>400°) as determined by TGA.

IT 115489-93-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and characterization of)
RN 115489-93-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenylenesulfonyl-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



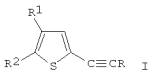
L19 ANSWER 230 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

L19 ANSWER 231 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1988:433870 CAPLUS
DOCUMENT NUMBER: 109:33870
TITLE: Preparation of 2-substituted ethynylthiophene acaricides and insecticides
INVENTOR(S): Burkart, Susan Ellen; Phillips, Richard Benton; Roush, David Michael
PATENT ASSIGNEE(S): FMC Corp., USA
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 8800467 | A1 | 19880128 | WO 1987-US846 | 19870414 |
| W: AU, BR, DK, JP, KR | | | | |
| RW: CH, DE, FR, GB, NL | | | | |
| AU 8775446 | A | 19880210 | AU 1987-75446 | 19870414 |
| CN 87103400 | A | 19880406 | CN 1987-103400 | 19870507 |
| ZA 8705426 | A | 19880330 | ZA 1987-5426 | 19870723 |
| PRIORITY APPLN. INFO.: | | | US 1986-889040 A | 19860723 |
| | | | WO 1987-US846 A | 19870414 |

OTHER SOURCE(S): MARPAT 109:33870
GI

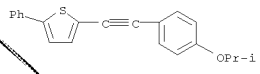


I

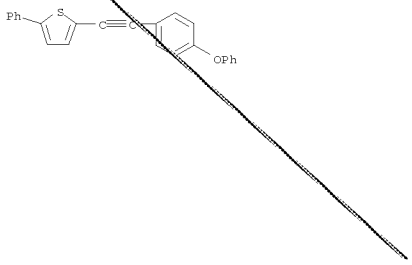
AB The 2-ethynylthiophene derivs. I [R = phenylthienyl, (un)substituted Ph; R1 = H, alkyl; R2 = (un)substituted thienyl, (un)substituted Ph] are prepared as acaricides and insecticides. A solution of 5-formyl-2-phenylthiophene (preparation given) and di-Et (4-chlorophenyl)chloromethylphosphonate (preparation given) in DMF was treated with NaOMe to give 1-(5-phenylthien-2-yl)-2-chloro-2-(4-chlorophenyl)ethene, which was refluxed for 4 h with tert-BuOK in THF, to give I (R = 4-ClC6H4, R1 = H, R2 = Ph) (II). II (50 ppm) totally controlled Tetranychus urticae on bean leaf segments.

IT 115219-74-4P 115219-75-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as acaricide)
RN 115219-74-4 CAPLUS
CN Thiophene, 2-[[4-(1-methylethoxy)phenyl]ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 231 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



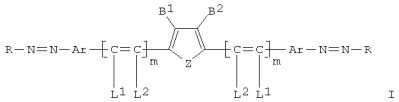
RN 115219-75-5 CAPLUS
CN Thiophene, 2-[(4-phenoxyphenyl)ethynyl]-5-phenyl- (9CI) (CA INDEX NAME)



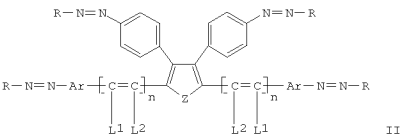
L19 ANSWER 232 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:524534 CAPLUS
DOCUMENT NUMBER: 107:124534
TITLE: Disazo and/or tetrakisazo compounds for electrophotography and laser-sensitive optical recording
INVENTOR(S): Horie, Seiji; Makino, Naonori; Sato, Hideo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 62047053 | A | 19870228 | JP 1985-187095 | 19850826 |
| JP 05049104 | B | 19930723 | | |
| PRIORITY APPLN. INFO.: | | | JP 1985-187095 | 19850826 |

GI



I

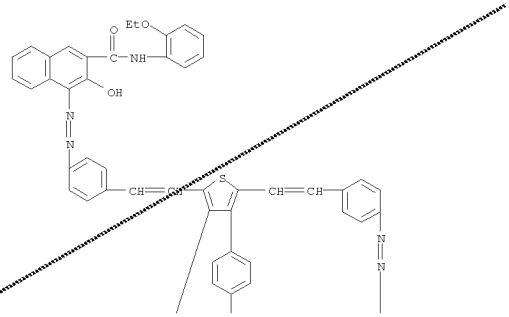


II

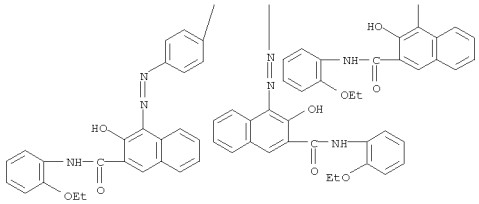
AB The disazo compds. have the formula I and the tetrakisazo compds. have the formula II (R = coupler residue having OH group; L1, L2 = H, electron-withdrawing group; Z = NR6, O, S, Se; R6 = H, low alkyl, aryl, etc.; Ar = arylene, heteroarylene; B1, B2 = H, halo, low alkyl; m, n = 0, 1, 2). Electrophotog. photoconductors contain ≥1 of the disazo and tetrakisazo charge-generating compds. show improved sensitivity and durability. A laser disk with a recording layer containing nitrocellulose and a disazo compound of the formula I shows improved sensitivity and storage stability.

L19 ANSWER 232 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 110308-50-4
RL: USES (Uses)
(electrophotog. photoreceptors containing)
RN 110308-50-4 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4',4'',4'''-[2,3,4,5-thiophenetetrayltetrakis(2,1-ethenediyl-4,1-phenyleneazo)]tetrakis[N-(2-ethoxyphenyl)-3-hydroxy- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



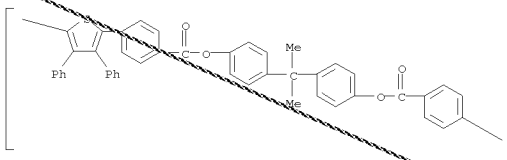
L19 ANSWER 232 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L19 ANSWER 233 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1987:157084 CAPLUS
DOCUMENT NUMBER: 106:157084
TITLE: Polyesters containing tetraphenylthiophene groups
INVENTOR(S): Imai, Yoshio; Kakimoto, Masaaki; Negi, Yuvraj Singh
PATENT ASSIGNEE(S): University of Tokyo, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 61207430 | A | 19860913 | JP 1985-45730 | 19850309 |
| JP 03063972 | B | 19911003 | | |
| PRIORITY APPLN. INFO.: | | | JP 1985-45730 | 19850309 |

AB Polyesters [COZCO2Z1O]n (at least some of Z are tetraphenylthiophene residues; Z1 = arylene; n = 10-2000), soluble in organic solvents and having high glass-transition temps., are prepared by treating Z(COX)2 (X = halo) with dihydric phenols Z1(OH)2 in organic solvents or in organic solvent-aqueous alkali 2-phase media. Thus, treating (4-HOC6H4)2CMe2 with 2,5-bis[4-(chloroformyl)phenyl]-3,4-diphenylthiophene in aqueous NaOH-PhNO2 in the presence of PhCH2NEt3+ Cl- at room temperature for 1 h gave 92% white polymer with inherent viscosity 0.45 dL/g (0.5 g/dL o-C6H4Cl2, 30°), 10% weight-loss temperature 470° in air and 485° in N, and solubility at room temperature in CHCl3, C6H6, pyridine, and o-ClC6H4OH.
IT 104909-92-4P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of solvent-soluble, heat-resistant)
RN 104909-92-4 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 233 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

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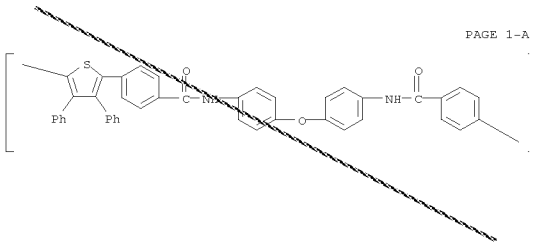
L19 ANSWER 234 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:573279 CAPLUS
DOCUMENT NUMBER: 105:173279
TITLE: Polyamide resins
INVENTOR(S): Imai, Yoshio; Kakimoto, Masaaki; Negi, Yuvraj Shingh
PATENT ASSIGNEE(S): Tokyo Institute of Technology, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 61062523 | A | 19860331 | JP 1984-183831 | 19840904 |
| JP 01049377 | B | 19891024 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-183831 | 19840904 |

AB Polyamides are prepared from derivs. of tetraphenylthiophene and diamines.
The polyamides are soluble in organic solvents and have good heat resistance.
Thus, a solution of 0.10 g 4,4'-oxydianiline in 1.5 mL AcNMe2 was cooled to
0°, treated with 0.257 g 2,5-bis[4-(chloroformyl)phenyl]-3,4-diphenylthiophene and 0.2 mL AcNMe2, and stirred in an ice bath for 1.5 h to give a polyamide (97% yield) which was soluble in N-methyl-2-pyrrolidone
and AcNMe2, had intrinsic viscosity (0.5 g/dL in H2SO4 at 30°) 0.90, and had 10% weight loss at 520° in air or 515° in N.
IT 97429-39-5P
RL: PREP (Preparation)
(preparation of soluble, heat-resistant)
RN 97429-39-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A




L19 ANSWER 234 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

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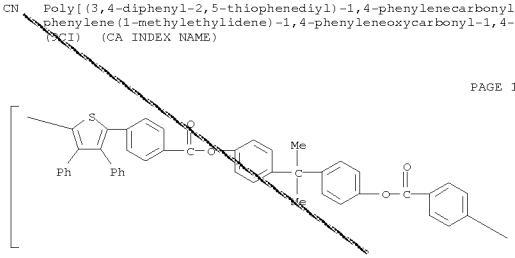
L19 ANSWER 235 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1986:573152 CAPLUS
DOCUMENT NUMBER: 105:173152
TITLE: Synthesis and characterization of aromatic polyesters and poly(amide esters) from bisphenols and aromatic aminophenols, and 2,5-bis(4-chloroformyl)-3,4-diphenylthiophene
AUTHOR(S): Kakimoto, Masaaki; Negi, Yuvraj Singh; Imai, Yoshio
CORPORATE SOURCE: Dep. Text. Polym. Mater., Tokyo Inst. Technol., Tokyo,
152, Japan
SOURCE: Journal of Polymer Science, Part A: Polymer Chemistry
(1986), 24(7), 1511-17
CODEN: JPACEC; ISSN: 0887-624X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Polycondensation of 2,5-bis[4-(chloroformyl)phenyl]-3,4-diphenylthiophene (I) with various bisphenols afforded tetraphenylthiophene-containing aromatic
polyesters by the interfacial or solution polycondensation method. Polyamide-esters were obtained from I and aminophenols by the interfacial technique. These polymers had inherent viscosities of 0.4-0.8 dL/g. All the polymers were readily soluble in various organic solvents, and could be cast
into transparent and flexible films. Their glass transition temps. were in the range of 235-335°. These polymers did not lose weight below 400° in either air or N.
IT 104909-92-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 104909-92-4 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonyloxy-1,4-phenylene(1-methylethylidene)-1,4-phenyleneoxycarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A



L19 ANSWER 235 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

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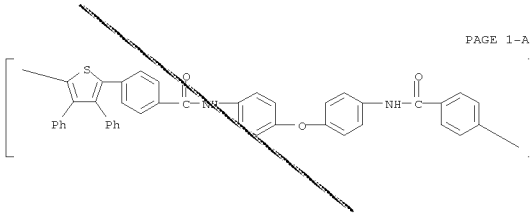
L19 ANSWER 236 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:534489 CAPLUS
DOCUMENT NUMBER: 105:134489
TITLE: Tetraphenylthiophenedicarboxylic acid derivatives
INVENTOR(S): Imai, Yoshio; Kakimoto, Masaaki; Negi, Yuvraj Singh
PATENT ASSIGNEE(S): Tokyo Institute of Technology, Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 61063672 | A | 19860401 | JP 1984-183832 | 19840904 |
| JP 01024151 | B | 19890510 | | |
| PRIORITY APPLN. INFO.: | | | JP 1984-183832 | 19840904 |

AB Title compds. (acid, acid halide, or ester derivs.) useful as materials for heat resistant resins with excellent moldability, are prepared by treating tetraphenylthiophene (II) with carboxylic acid halides over Friedel-Crafts reagents. Thus, treating II with AcCl in nitrobenzene over AlCl3 at room temperature for 2 h with stirring gave 61% 2,5-bis(4-acetylphenyl)-3,4-diphenylthiophene, which was then heated with NaOCl at 70° for 18 h to give 94% tetraphenylthiophenedicarboxylic acid.
IT 97429-39-5P
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of heat-resistant)
RN 97429-39-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

PAGE 1-A




L19 ANSWER 236 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

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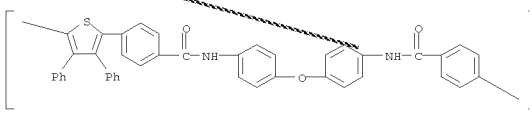
L19 ANSWER 237 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:454526 CAPLUS
DOCUMENT NUMBER: 103:54526
TITLE: Synthesis and characterization of soluble aromatic polyamides derived from 2,5-bis(4-chloroformylphenyl)-3,4-diphenylthiophene and aromatic diamines
AUTHOR(S): Kakimoto, Masaaki; Negi, Yuvraj Singh; Imai, Yoshio
CORPORATE SOURCE: Dep. Text. Polym. Mater., Tokyo Inst. Technol., Tokyo, 152, Japan
SOURCE: Journal of Polymer Science, Polymer Chemistry Edition (1985), 23(6), 1787-95
CODEN: JPLCAT; ISSN: 0449-296X
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 2,5-Bis(4-carboxyphenyl)-3,4-diphenylthiophene [97483-30-2], was synthesized either by the Friedel-Crafts reaction of tetraphenylthiophene (I) [1884-68-0] with oxalyl chloride, or by the Friedel-Crafts acetylation of I followed by oxidation The low temperature solution polycondensation of 2,5-bis(4-chloroformylphenyl)-3,4-diphenylthiophene [97463-89-3] with various aromatic diamines in N,N-dimethylacetamide (II) afforded I-containing aromatic polyamides with inherent viscosities of 0.5-1.0 dL/g. Copolyamides were obtained from a mixture of the diacid chloride and isophthaloyl or terephthaloyl chloride. All except 2 of the polyamides were readily soluble in amide-type solvents including II and were cast into transparent and flexible films. These polymers had glass transition at .apprx.300°. Thermal stability of the polymers was evaluated by thermogravimetry, which showed no weight loss below 390° in both air and N atms.
IT 97429-39-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 97429-39-5 CAPLUS
CN Poly[(3,4-diphenyl-2,5-thiophenediyl)-1,4-phenylenecarbonylimino-1,4-phenyleneoxy-1,4-phenyleneiminocarbonyl-1,4-phenylene] (9CI) (CA INDEX NAME)

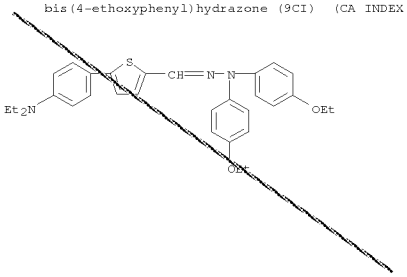
PAGE 1-A



L19 ANSWER 237 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B

L19 ANSWER 238 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 95897-32-8
RL: USES (Uses)
(electrophotog. charge-transport agents)
RN 95897-32-8 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-[4-(diethylamino)phenyl]-, bis(4-ethoxyphenyl)hydrazone (9CI) (CA INDEX NAME)

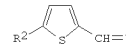


L19 ANSWER 238 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:157989 CAPLUS
DOCUMENT NUMBER: 102:157989
TITLE: Electrophotographic photoreceptor
PATENT ASSIGNEE(S): Canon K. K., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

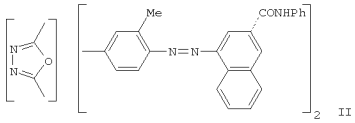
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| JP 59185341 | A | 19841020 | JP 1983-59332 | 19830406 |
| JP 04075497 | B | 19921201 | | |

PRIORITY APPLN. INFO.: JP 1983-59332 19830406

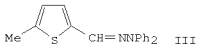
GI



I



II



III

AB The electrophotog. photoreceptor contains a hydrazone derivative having the general formula I (R, R1 = alkyl, aralkyl, aryl that may be substituted, but not alkyl simultaneously; R2 = alkyl, aryl, substituted alkyl, alkoxy or aryl, halo) as a charge-transport substance. Thus, a casein-coated Al plate was coated with EtOH solution of a bisazo dye II 5 and butyral resin 29, to form the charge-generating layer. The charge-transport layer was formed by coating a composition containing III 5 and poly(4,4'-dioxydiphenyl-2,2-propanecarbonate) 5 g in CH2Cl2. Obtained photoreceptor was charged to -575 V, of which 99% was retained after 10 s. Sensitivity (for half decay of voltage) was 7.3 lx-s.

L19 ANSWER 239 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1983:558117 CAPLUS
DOCUMENT NUMBER: 99:158117
TITLE: Aminocyclopentane esters and their pharmaceutical formulation
INVENTOR(S): Collington, Eric W.; Hallett, Peter; Wallis, Christopher J.; Wadsworth, Alan; Hayes, Norman F.; Bradshaw, John; Carter, Malcolm
PATENT ASSIGNEE(S): Glaxo Group Ltd., UK
SOURCE: Eur. Pat. Appl., 74 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| EP 74861 | A1 | 19830323 | EP 1982-304886 | 19820916 |
| EP 74861 | B1 | 19860827 | | |
| R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE | | | | |
| DK 8204138 | A | 19830317 | DK 1982-4138 | 19820916 |
| AU 8288459 | A | 19830324 | AU 1982-88459 | 19820916 |
| AU 561140 | B2 | 19870430 | | |
| JP 58074659 | A | 19830506 | JP 1982-161554 | 19820916 |
| ZA 8206805 | A | 19830727 | ZA 1982-6805 | 19820916 |
| ES 515761 | A1 | 19831001 | ES 1982-515761 | 19820916 |
| US 4410521 | A | 19831018 | US 1982-418975 | 19820916 |
| CA 1190926 | A1 | 19850723 | CA 1982-411565 | 19820916 |
| AT 21695 | T | 19860915 | AT 1982-304886 | 19820916 |
| IL 67041 | A | 19880331 | IL 1982-67041 | 19821021 |
| FI 8203690 | A | 19830430 | FI 1982-3690 | 19821028 |
| FI 77242 | B | 19881031 | | |
| FI 77242 | C | 19890210 | | |
| US 4482549 | A | 19841113 | US 1984-578014 | 19840208 |

PRIORITY APPLN. INFO.: GB 1981-27982 A 19810916
GB 1981-32675 A 19811029
GB 1982-12489 A 19820429
GB 1982-13069 A 19820506
EP 1982-304886 A 19820916
US 1982-418976 A1 19820916
US 1983-510969 A1 19830705

OTHER SOURCE(S): MARPAT 99:158117
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Approx. one-hundred and forty I (R = saturated 5-8 membered N heterocycle,

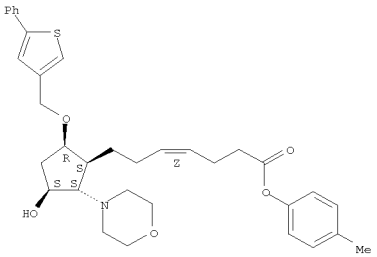
L19 ANSWER 239 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
optionally contg., e.g., O, S, NH; R1, R2 = groups assocd. with prostaglandins; X = O or H,β-OH; A = C1-7 alkylene; Q = CH:CH, CH2CH2) were prepd. from known prostaglandin analogs or intermediates. Typical of compds. prepd. were II-IV.

IT 87204-10-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)

RN 87204-10-2 CAPLUS

CN 4-Heptenoic acid, 7-[3-hydroxy-2-(4-morpholinyl)-5-[(5-phenyl-3-thienyl)methoxy]cyclopentyl]-, 4-methylphenyl ester, [1α(Z),2β,3α,5α]- (9CI) (CA INDEX NAME)

Relative stereochemistry.
Double bond geometry as shown.



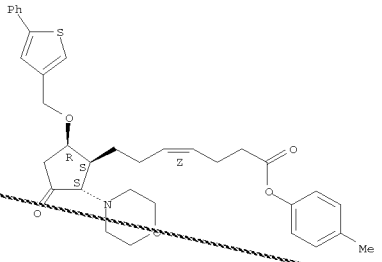
IT 87214-29-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 87214-29-7 CAPLUS

CN 4-Heptenoic acid, 7-[2-(4-morpholinyl)-3-oxo-5-[(5-phenyl-3-thienyl)methoxy]cyclopentyl]-, 4-methylphenyl ester, [1α(Z),2β,5α]- (9CI) (CA INDEX NAME)

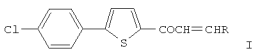
Relative stereochemistry.
Double bond geometry as shown.

L19 ANSWER 239 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L19 ANSWER 240 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1979:137601 CAPLUS
DOCUMENT NUMBER: 90:137601
TITLE: Thiophene derivatives. IV. α,β-Unsaturated ketones of the phenylthiophene series
AUTHOR(S): Fisera, L.; Kovac, J.; Hrabovsky, J.
CORPORATE SOURCE: Zb. Pr. Chemickotechnol. Fak., Slov. Vys. Sk. Tech., Bratislava, Czech.
SOURCE: Zbornik Prac Chemickotechnologickej Fakulty SVST (1978), Volume Date 1975-1976 91-6
CODEN: ZPCTA7; ISSN: 0524-2185
DOCUMENT TYPE: Journal
LANGUAGE: Slovak
OTHER SOURCE(S): CASREACT 90:137601
GI



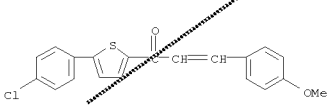
I

AB Chalcone analogs I [R = Ph, 3,4-(MeO)2C6H3, R1C6H4; R1 = 4-Br, 4-Cl, 4-Me2N, 4-H2N, 3- and 4-O2N and -MeO] were prepared in 20.5-69.7% yield by acetylating 2-(4-chlorophenyl)thiophene with Ac2O containing H3PO4 to give 52.6% 2-acetyl-5-(4-chlorophenyl)thiophene, and condensing the latter with the corresponding RCHO in EtOH containing NaOH. I exist as mixts. of s'-trans-s-cis and s'-cis-s-trans conformers, according to their IR spectra. The C:O stretching frequencies of I correlated with the Hammett σ+ consts. of the substituents.

IT 69512-75-0P 69512-77-2P 69512-78-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, IR spectrum and conformation of)

RN 69512-75-0 CAPLUS

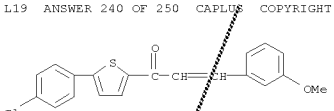
CN 2-Propen-1-one, 1-[5-(4-chlorophenyl)-2-thienyl]-3-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 69512-77-2 CAPLUS

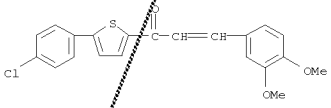
CN 2-Propen-1-one, 1-[5-(4-chlorophenyl)-2-thienyl]-3-(3-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 240 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 69512-78-3 CAPLUS

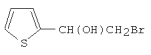
CN 2-Propen-1-one, 1-[5-(4-chlorophenyl)-2-thienyl]-3-(3,4-dimethoxyphenyl)- (9CI) (CA INDEX NAME)

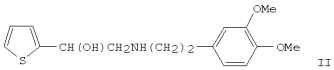


L19 ANSWER 241 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1977:484804 CAPLUS
DOCUMENT NUMBER: 87:84804
TITLE: 1-(2-Thienyl)-2-aminoethanols
INVENTOR(S): Bagli, Jehan F.; Ferdinandi, Eckhardt
PATENT ASSIGNEE(S): American Home Products Corp., USA
SOURCE: U.S., 10 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 4024156 | A | 19770517 | US 1975-569509 | | 19750418 |
| CA 1030146 | A1 | 19780425 | CA 1974-197896 | | 19740418 |
| PRIORITY APPLN. INFO.: | | | CA 1974-197896 | A | 19740418 |

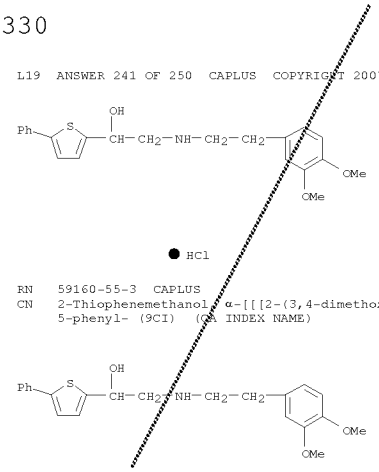
OTHER SOURCE(S): MARPAT 87:84804
GI


I


II

AB Approx. thirty title compds., useful as β-sympatholytics and antihypertensives, were prepared Thus, I with 3,4-(MeO)2C6H3CH2CH2NH2 gave II.
IT 59160-37-1P 59160-55-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, for use as antihypertensive and β-sympatholytic)
RN 59160-37-1 CAPLUS
CN 2-Thiophenemethanol, α-[[[2-(3,4-dimethoxyphenyl)ethyl]amino]methyl]-5-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

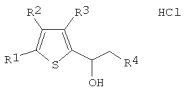
L19 ANSWER 241 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 59160-55-3 CAPLUS
CN 2-Thiophenemethanol, α-[[[2-(3,4-dimethoxyphenyl)ethyl]amino]methyl]-5-phenyl- (9CI) (CA INDEX NAME)

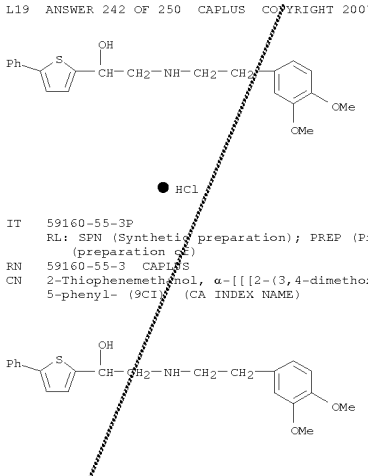


L19 ANSWER 242 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1976:428483 CAPLUS
DOCUMENT NUMBER: 85:28483
TITLE: Synthesis and antihypertensive activity of some thienylethanolamines
AUTHOR(S): Bagli, Jehan F.; Mackay, Walter D.; Ferdinandi, Eckhardt; Cayen, Mitchell N.; Vavra, Ivan; Pugsley, Thomas; Lippmann, Wilbur
CORPORATE SOURCE: Dep. Chem., Ayerst Res. Lab., Montreal, QC, Can.
SOURCE: Journal of Medicinal Chemistry (1976), 19(7), 876-82
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 85:28483
GI


I

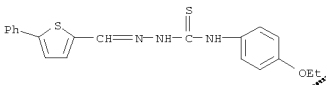
AB Synthesis of a series of thienylethanolamines (I) having varying substituents on the thiophene ring and on the N atom is described using the general procedure reported earlier. Some of the derivs. showed marked antihypertensive activity in the spontaneously hypertensive rat model. Somes of these derivs. also antagonized α- and β-adrenoreceptor activities. The ability of this class of compds. to inhibit catechol amine-induced release of free fatty acids by adipose tissue was demonstrated. Structure-activity relationships are discussed.
IT 59160-37-1P
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(preparation and pharmacol. of)
RN 59160-37-1 CAPLUS
CN 2-Thiophenemethanol, α-[[[2-(3,4-dimethoxyphenyl)ethyl]amino]methyl]-5-phenyl-, hydrochloride (9CI) (CA INDEX NAME)

L19 ANSWER 242 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

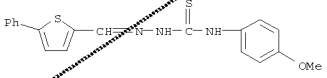


IT 59160-55-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 59160-55-3 CAPLUS
CN 2-Thiophenemethanol, α-[[[2-(3,4-dimethoxyphenyl)ethyl]amino]methyl]-5-phenyl- (9CI) (CA INDEX NAME)

L19 ANSWER 243 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1971:448795 CAPLUS
DOCUMENT NUMBER: 75:48795
TITLE: Potential antituberculotic compounds. XVII. Thiosemicarbazones and a Schiff's base of α-phenyl-α'-formylthiophene
AUTHOR(S): Misra, Vinay S.; Khare, Anakshi
CORPORATE SOURCE: Dep. Chem., Lucknow Univ., Lucknow, India
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1970), 312(6), 1188-90
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB 5-Phenyl-2-thiophenecarboxaldehyde (I) is treated with thiosemicarbazides H2NNHCSNHR to give the corresponding I thiosemicarbazones (II). Thus, I is treated with H2NNHCSNHPh to give I 4-phenylthiosemicarbazone. Similarly prepared are II (R = substituted phenyl, 2-C10H7, cyclohexyl).
I
acylhydrazones (III) are prepared by the treatment of I with AcCONHNH2 (Ar =
Ph, substituted phenyl). I is treated with p-toluidine to give a Schiff base.
IT 32973-27-6P 32973-33-4P 32973-34-5P
32973-35-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 32973-27-6 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-phenyl-, 4-(p-ethoxyphenyl)-3-thiosemicarbazone (8CI) (CA INDEX NAME)

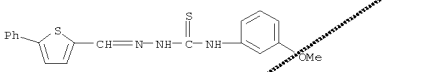


RN 32973-33-4 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-phenyl-, 4-(p-methoxyphenyl)-3-thiosemicarbazone (8CI) (CA INDEX NAME)

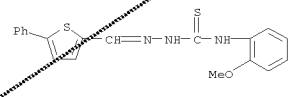


RN 32973-34-5 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-phenyl-, 4-(m-methoxyphenyl)-3-thiosemicarbazone (8CI) (CA INDEX NAME)

L19 ANSWER 243 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 32973-35-6 CAPLUS
CN 2-Thiophenecarboxaldehyde, 5-phenyl-, 4-(o-methoxyphenyl)-3-thiosemicarbazone (8CI) (CA INDEX NAME)

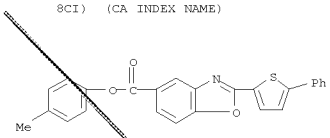


L19 ANSWER 244 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1968:478434 CAPLUS
DOCUMENT NUMBER: 69:78434
TITLE: Fluorescent whiteners
INVENTOR(S): Maeder, Erwin; Liechti, Peter; Siegrist, Adolf E.
PATENT ASSIGNEE(S): CIBA Ltd.
SOURCE: Patentschrift (Switz.), 8 pp.
CODEN: SWXXAS
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

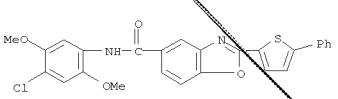
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| CH 442216 | | 19680131 | CH 1963-14122 | 19631118 |

GI For diagram(s), see printed CA Issue.
AB I are useful for incorporation in polyester or polyamide melts before spinning into fibers. Thus, a mixture of 5-phenylthiophene-2-carboxylic acid 51, 3,4-H2N(HO)C6H3CO2Me 40, and H3BO3 2 parts was stirred with 150 vols. (EtOCH2CH2)2O under N, heated to 185-90° in 1 hr. (dark solution evolves H2O), stirred for 1-2 hrs. at 185-90°, slowly evaporated, the dark melt stirred for 2 hrs. at 260°, cooled, dissolved in 1000 parts hot HCONMe2, clarified, concentrated, and precipitated with MeOH to give 50 parts
I (X = Y = Z = H, R = OMe) (II), small colorless needles, m. 194-5° (dioxane). Similarly were prepared other I (R = OMe) (X, Y, Z, appearance,
and m.p. given): MeO, H, H, small light yellow needles, 184-5° (Me2CO, vacuum sublimation) (intermediate o-hydroxyanilide m. 258-60°); Me, H, H, colorless needles, 175-6° (PhMeMeOH) (intermediate o-hydroxyanilide m. 274-6°); Cl, OMe, OMe, yellow needles, 228-9° (dioxane). A mixture of II 33.5, NaOH 40, H2O 100, and EtOH 400 parts was boiled under reflux for 24 hrs., diluted with 500 parts H2O, the alc. evaporated in vacuo, and the solution acidified to precipitate I (X
= Y = Z = H, R = OH) (III), yellowish powder, m. 281-3.5° (C6H4Cl2) (Ca salt m. >320°). Similarly was prepared I (X = MeO, Y = Z = H, R = CO2H), m. 293-4° (Me2CO, vacuum sublimation). A mixture of 9.6 parts III and 30 vols. SOCl2 was refluxed for 12 hrs., excess SOCl2 evaporated
in vacuo, the solid residue suspended in 30 vols. dry pyridine, treated dropwise with 4.5 parts morpholine, boiled for 3 hrs., cooled, and diluted
with 50 vols. MeOH to give 7.2 parts I (X = Y = Z = H, R = morpholino), yellowish glittering crystals, m. 189.5-90.5° (EtOH). Similarly were prepared other I (X = Y = Z = H) (R and m.p. given): NHPh, 240-1° (dioxane); NHC6H2(OMe)2Cl-2,5,4, 200-1° (C6H6); NHCH2CH2OH, 217.5-18° (EtOH); NHCH2CH:CH2, 222-3° (dioxane); NH2, 239-41° (dioxane-AcOEt); OCH2CH:CH2, 155.5-6.5° (cyclohexane); OCH2Ph, 167-8° (Me2CO); OC6H4Me-4, 207.5-8.5° (PhCl-EtOH); OCHMe2, 141.5-2°; OCH2CHEtBu, 147-8°; O(CH2)15Me, 106-8°; O(CH2CH2O)2Bu, - (waxy precipitate from CH2Cl2-petroleum ether).
IT 2493-15-4P 2493-21-2P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)
RN 2493-15-4 CAPLUS
CN 5-Benzoxazolecarboxylic acid, 2-(5-phenyl-2-thienyl)-, p-tolyl ester (7CI,

L19 ANSWER 244 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
8CI) (CA INDEX NAME)



RN 2493-21-2 CAPLUS
CN 5-Benzoxazolecarboxanilide, 4'-chloro-2',5'-dimethoxy-2-(5-phenyl-2-thienyl)- (7CI, 8CI) (CA INDEX NAME)

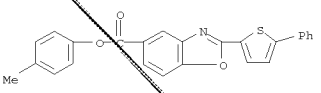


L19 ANSWER 245 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1965:91539 CAPLUS
DOCUMENT NUMBER: 62:91539
ORIGINAL REFERENCE NO.: 62:16423f-h,16424a-c
TITLE: Thienyl benzoxazole optical brighteners
PATENT ASSIGNEE(S): Ciba Soc.
SOURCE: 21 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

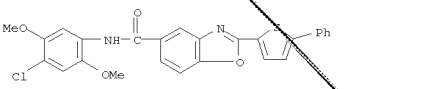
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| BE 641607 | | 19640622 | BE | 19631220 |
| FR AD84935 | | | FR | |
| GB 1016365 | | | GB | |
| NL 302367 | | | NL | |
| PRIORITY APPLN. INFO.: | | | CH | 19621221 |

GI For diagram(s), see printed CA Issue.
AB Compds. of the general formula I, useful for brightening polyamide and polyester fibers, are prepared by the H3BO3-catalyzed ring closure under N of an o-hydroxyarylamide derived from the reaction of a 5-aryl-2-thiophenecarboxylic acid chloride with 2,5-HO(MeO2C)C6H3NH2 (II). When W = X = Y = H, II is treated with the carboxylic acid directly to effect amide formation and ring closure in one step. The Me esters can be hydrolyzed to the carboxylic acids and from the latter, via the acid chloride in situ, a series of esters and amides is prepared Thus, a mixture of 5-phenyl-2-thiophenecarboxylic acid 51, II 40 and H3BO3 2 parts in (EtOCH2CH2)2O 150 vols. is heated under N to 185-90° over 1 hr. and, after 1-2 hrs., the solvent is slowly distilled and the residue heated 2 hrs. at 260°. After cooling, the whole is dissolved in HCONMe2 1000 parts, the solution filtered, diluted with MeOH and cooled to precipitate I (X = Y = W = H, Z = OMe) (III), colorless needles, m. 194-5° (dioxane). III 33.5 is refluxed for 24 hrs. in H2O 100 parts and EtOH 400 vols. containing NaOH 40 parts to yield, after the EtOH is distilled and the remaining solution filtered and neutralized, 27 parts I (W = X = Y = H, Z = OH) (IV), yellow powder, m. 281-3.5° (o-Cl2C6H4). Also prepared are the I given in the table. The following V were isolated (X, color, and m.p. given): MeO, beige, 258-60°; Me, brown, 274-6°. Also given is the preparation of the Ca salt of IV, yellow powder, m. >320°. W, X, Y, Z, m.p.; H, MeO, H, OMe, 184-5° (distilled); H, MeO, H, OH, 293-4° (sublimed); H, Me, H, OMe, 175-6° (PhMe-MeOH); MeO, Cl, MeO, OMe, 228-9° (dioxane); H, H, H, N-morpholinyl, 189.5-90.5°(EtOH); H, H, H, PhNH, 240-1° (dioxane); H, H, H, 4,2,5-Cl(MeO)2C6H2NH, 200-1° (C6H6); H, H, H, HOCH2CH2NH,

L19 ANSWER 245 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
217.5-18° (EtOH); H, H, H, CH2:CHCH2NH, 222-3° (dioxane); H, H, H, NH2, 239-41°(EtOAc-dioxane); H, H, H, CH2:CHCH2O, 155.5-6.5°(cyclohexane); H, H, H, PhCH2O, 167-8° (acetone); H, H, H, 4-MeOC6H4O, 207.5-8.5°(PhCl-EtOH); H, H, H, iso-PrO, 141.5-2°; H, H, H, Me(CH2)3CH(Et)CH2O, 147-8°; H, H, H, Me(CH2)14CH2O, 106-8°; H, H, H, Me(CH2)3O(CH2CH2O)2, -; .
IT 2493-15-4P, 5-Benzoxazolecarboxylic acid, 2-(5-phenyl-2-thienyl)-, p-tolyl ester 2493-21-2P, 5-Benzoxazolecarboxanilide, 4'-chloro-2',5'-dimethoxy-2-(5-phenyl-2-thienyl)-
RL: PREP (Preparation)
(preparation of)
RN 2493-15-4 CAPLUS
CN 5-Benzoxazolecarboxylic acid, 2-(5-phenyl-2-thienyl)-, p-tolyl ester (7CI, 8CI) (CA INDEX NAME)



RN 2493-21-2 CAPLUS
CN 5-Benzoxazolecarboxanilide, 4'-chloro-2',5'-dimethoxy-2-(5-phenyl-2-thienyl)- (7CI, 8CI) (CA INDEX NAME)

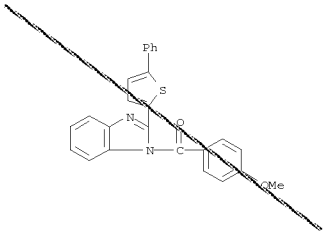


L19 ANSWER 246 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1963:475802 CAPLUS
DOCUMENT NUMBER: 59:75802
ORIGINAL REFERENCE NO.: 59:14145d-h,14146a-c
TITLE: 2-Phenyl-5-(2-benzimidazolyl)thiophenes and 2-phenyl-5-(2-banzoxazolyl)thiophenes as optical brighteners
PATENT ASSIGNEE(S): CIBA Ltd.
SOURCE: 65 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| BE 620372 | | 19630118 | BE | |
| CH 405223 | | | CH | |
| FR 1335174 | | | FR | |
| GB 990397 | | | GB | |
| US 3264315 | | 19660802 | US 1963-328112 | 19631204 |
| PRIORITY APPLN. INFO.: | | | CH | 19610719 |

GI For diagram(s), see printed CA Issue.
AB 2-Phenyl-5-thiophenecarboxylic acids are treated with o-aminophenols and 1,2-diaminobenzenes in the presence of H3BO3 to give the title compds. which can be used as optical brighteners for synthetic fibers and plastics. Thus, a mixture of 5-phenyl-2-thio-phenecarboxylic acid 51, 3,4-(H2N)2C6H3Me 35, and H3BO3 3 parts is heated at 230° under N for 1.5 hrs., 70 parts HCONMe2 is added slowly, and 2N HCl is added to give a precipitate The precipitate is filtered, washed with H2O, suspended in 500 parts HCONMe2, treated with excess NH3, and precipitated with H2O to give 58 parts 2-(5-methyl-2-benzimidazolyl)-5-phenylthiophene, beige powder, m. 196.5-7° (C6H6). Similarly prepared are compds. of general formula I (R, R1, R2, R3, R4, R5, m.p. given): Ph, H, H, Me, Me, H, 235-6° (C6H6); Ph, H, H, H, H, Me, 143.5-4° (EtOAc); Ph, H, H, H, H, H, 255-6° (EtOH); Ph, H, H, MeO, H, H, 205-6° (EtOH); 2,5-Cl2C6H3, H, H, Me, H, H, 130-1.5° (EtOH-EtOAc); p-ClC6H4, H, H, Me, H, H, 262-3° (EtOAc); p-tolyl, H, H, Me, H, H, 257-7.5° (EtOH-C6H6); 2,5-Me2-C6H3, H, H, Me, H, H, 223-4° (C6H6); 3,4-Cl2C6H3, Me, Ph, Me, H, H, 213-14° (EtOH); 4,2-Cl(Me)C6H3, H, H, H, H, H, 248-8.5° (EtOH-EtOAc); 4,2,6-Cl(MeO)2C6H2, H, H, H, H, H, 249-50° (MeOH-EtOAc); 2-ClOH7, H, H, H, H, H, 251.5-2.5° (EtOAc); Ph, H, H, H, H. (CH2)2CN, 159-9.5° (EtOH); Ph, H, H, H, H, p-MeOC6H4CO, 160-1° (EtOH-EtOAc); Ph, H, H, H, H, PhCH2, 218-19° (EtOH-H2O). Compds. of the general formula II are prepared similarly from o-aminophenols (R, R1, R2, R3, R4, R5, R6, m.p. given): Ph, H, H, H, Me, H, H, 152.5-3° (C6H6-EtOH); Ph, H, H, H, H, Me, H, 154-4.5° (EtOH); Ph, H, H, Me, H, H, H, 105-5.5° (EtOH); Ph, H, H, H, tert-Bu, H, H, 136-7° (MeOH); Ph, H, H, H, tert-BuCH2CMe2, H, H, 115.5-16.5° (C6H6-EtOH); Ph, H, H, H, C9H19, H,H, -; Ph, H,H,H, C12H25, H,H, -; Ph, H,H,H, PhCMe2, H, H, 111-12° (EtOH-EtOAc); Ph, H, H, H, cyclohexyl, H, H, 151.5-2° (C6H6-EtOH); Ph, H, H, H, Ph, H, H, 204-5.5° (HCONMe2); Ph, H, H, H, (CH2)2CN, H, H, 151-2° (EtOAc); Ph, H, H, H, MeO, H, H, 133.5-5° (EtOH); Ph, H, H, H, F, H, H, 182.5-3° (EtOH-dioxane); Ph, H, H, H, Cl, H, H, 184-5° (EtOH-PhCl); Ph, H, H, H, H, H, H, 146.5-7° (EtOH); Ph, H, H, H, Me, Me, H, 173.5-4° (dioxane-EtOH); Ph, H, H, H, tert-Bu, H, tert-Bu, -; Ph, H, H, Me, tert-Bu, H, tert-Bu, 153-4° (C6H6-EtOH); Ph, H, H, H, Pr, H, H, 89-9.5° (EtOH); Ph, H, H, H, H, H, sec-Bu, -; Ph, H, H, H, H, (CH2)2CO2Me, H, H, 109-10° (MeOH); Ph, H, H, H, (CH2)2-CO2H, H, H, 199-200° (EtOH); 2,5-Cl2C6H3, H, H, H, Ph, H, H, 135-7° (EtOAc-EtOH); 4,2-Cl(Me)C6H3, H, H, H, Ph, H, H, 140-1° (EtOH-EtOAc); p-ClC6H4, H, H, H, Ph, H, H, 202-2.5° (dioxane); p-MeOC6H4, H, H, H, Ph, H, H, 178-9° (EtOAc-EtOH); p-tolyl, H, H, H, Ph, H, H, 179-80° (EtOAc); 3,4-Cl2C6H3, Me, Me, H, Ph, H, H, 218-19° (C6H6-EtOH): 3,4-Cl2C6H3, Me, Et, H, Ph, H, H, 124-5° (EtOH); 3,4-Cl2-C6H3, Me, Ph, H, Ph, H, H, 167-7.5° (HOAc-EtOH); 4,2,6-Cl(MeO)2C6H2, H, H, H, tert-Bu, H, H, 165-6° (MeCl-EtOH); 3,4-Cl2C6H3, H, H, H, Me, H, H, 163-4° (dioxane); 2-C10H7, H, H, H, Ph, H, H, 216-17° (EtOAc). Also prepd. are 2-(1H-naphth [2,3-d] imidazol-2-yl)-5-phenylthiophene, 228-9° (EtOAc); 3-ethyl-2-(5-phenyl-2-thienyl )benzimidazolium p-toluenesulfonate, m. 270-1° (HCONMe2); 2-(6,7,8,9-tetrahydro-2-naphth-[1,2-d]oxazolyl)-5-phenylthiophene, m. 131.5-3° (EtOAc EtOH); 2-(2-naphth [1,2-d]oxazolyl)-5-phenylthiophene, m. 151-1.5° (dioxane-EtOH); and 2-(2-benzothiazolyl)-5-phenyl-thiophene, m. 152-3° (EtOH). Polyacrylonitrile cloth (50 parts) is treated in a bath contg. H2O 1500, 85% HCO2H 2, and 2-(5-methyl-2-benzimidazolyl)-5-phenylthiophene 0.01 part at 85-95° for 30 min. to give a cloth which is brighter than material not treated with the thiophene compd.

L19 ANSWER 246 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
IT 96586-98-0P, Ketone, p-methoxyphenyl 2-(5-phenyl-2-thienyl)-1-benzimidazolyl
RL: PREP (Preparation)
(preparation of)
RN 96586-98-0 CAPLUS
CN Ketone, p-methoxyphenyl 2-(5-phenyl-2-thienyl)-1-benzimidazolyl (7CI) (CA INDEX NAME)



L19 ANSWER 247 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1962:67387 CAPLUS
DOCUMENT NUMBER: 56:67387
ORIGINAL REFERENCE NO.: 56:13047b-g
TITLE: Red azabenzanthrone dyes. 1-Substituted 2-oxo-3-alkyl-6-alkylamino-3-azabenzanthrones
AUTHOR(S): Simon, Myron S.; Rogers, Jean B.
CORPORATE SOURCE: Polaroid Corp., Cambridge, MA
SOURCE: Journal of Organic Chemistry (1961), 26, 4352-9 CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

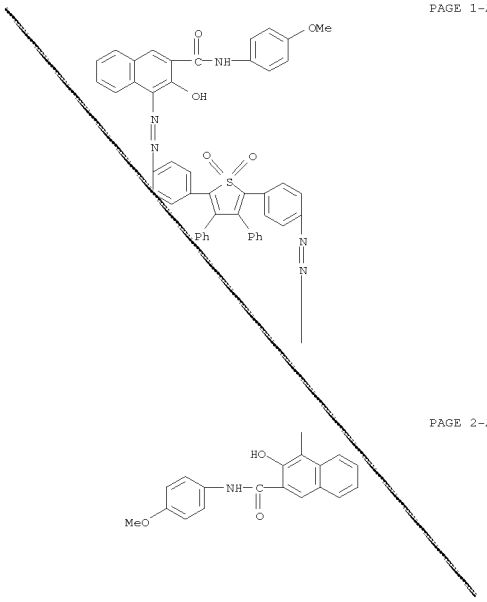
AB cf. CA 51, 3673b. 1-Alkoxy derivs. were prepared from N-chloroacetyl-1,4-bis(isopropyl-amino)anthraquinone (I), 1-chloro-2-oxo-3-isopropyl-6-isopropylamino-3-azabenzanthrone (II), and 1-pyridino-2-oxo-3-isopropyl-6-isopropylamino-3-azabenzanthrone chloride (III). The 1-alkoxy dyes are hydrolyzed by alkali to 1-hydroxy derivs. and are converted by NH3 to 1-amino derivs. They are stable to concentrated HCl. 1,4-Bis(isopropylamino)-anthraquinone (IV) was acetylated with Ac2O and NaOAc to give 84% of the N-Ac derivative (V), m. 161-2° (PhMe-petr. ether b. 90-120°). Chloroacetylation of IV in C6H6 gave 76% I, m. 167-8°(alc.) V was refluxed 1/2 hr. in Me Cellosolve with KOH to give 87.5% 2-oxo-3-isopropyl-6-isopropylamino-3-azabenzanthrone (VI), m. 261-3° (alc.). Treatment of I with alkali gave different products depending on conditions. In acetone or BuOH, aqueous alkali at 60° for 3/4 hr. gave 90-100% II m. 184-6°. When the solvent was a water-miscible alc. the Cl was replaced (at 60°) by the alkoxy group of the alc. giving 1-alkoxy derivs. At 100° the 1-hydroxy derivative was formed. Thus, I heated 1/2 hr. at 60° with NaOH in EtOH gave 65% 1-EtO derivative (VII), m. 174-5°, of VI. VII was also prepared in 61% yield from II. Similarly, I and BuOH gave 79% BuO analog (VIII), m. 181-2°, of VII. I and Me Cellosolve gave 83% of the MeOCH2CH2O analog (IX), m. 158-9°, of VII. Spectra of VIII and IX were almost identical to that of VII. I, NaOH, and Me Cellosolve at reflux gave 97% of the 1-HO analog (X), m. 273-5° (acetone) of VII. X was also prepared in 94.5% yield from II. I was refluxed 1 hr. in Me Cellosolve with NaNO2 to give 41% yield of the 1-NO2 analog (XI), m. 239-9.5°, of VII. V was refluxed with pyridine 1/2 hr. to give 76% III m. 235-5.5°. I heated 1 hr. at 125° with KCN in 90% HOCH2CH2OAc gave 59% of the 1-CN analog, m. 275-5.5°, of II. II treated with NH3 and Cu in EtOH at 100° gave 22% VI. In acetone the products were 2% IV, 2% 1-amino-4-isopropylaminoanthraquinone, and 7% of the 1-NH2 analog (XII), m. 201-2°, of II. XII was prepared in 100% yield (crude) by heating II and NH3 in EtOH for 18 hrs. at 100°. The 1-alkoxy derivs. and pyridinium salts are unstable in alkali or NH3. Heating HI with NaOEt for 1 hr. at 60° (in alc.) gave 7% VI and 65% VII. Refluxing III 1/2 hr. in water with Na2S2O4 gave 93% VI. Refluxing III in PhNO2 gave 54% II. XI was reduced catalytically with PtO2 to give 76% XII. XI was refluxed 21 hrs. in alc. with KOH to give 96% (crude) X. VII refluxed 1/2 hr. with alc. NaOH gave 53.5% X. IX heated 24 hrs. at 100 with NH3 in alc. gave 71.5% XII.

L19 ANSWER 247 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

IT 108041-54-9P, 2-Naphth-p-anisidide, 4,4''-[(3,4-diphenyl-2,5-thiophenediyl)bis(p-phenyleneazo)]bis[3-hydroxy-(7), S,S-dioxide
RL: PREP (Preparation)
(preparation of)

RN 108041-54-9 CAPLUS
CN 2-Naphth-p-anisidide, 4,4''-[(3,4-diphenyl-2,5-thiophenediyl)bis(p-phenyleneazo)]bis[3-hydroxy-, S,S-dioxide (7CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L19 ANSWER 248 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1962:67386 CAPLUS
DOCUMENT NUMBER: 56:67386
ORIGINAL REFERENCE NO.: 56:13045i,13046i,13047a-b
TITLE: Utilization of polystyrene residues. VI. Azoic dyes from thionessal and thionessal 1,1-dioxide
AUTHOR(S): Fortina, Luigi; Montaudo, Giorgio
CORPORATE SOURCE: Univ. Catania, Italy
SOURCE: Annali di Chimica (Rome, Italy) (1961), 51, 95-9 CODEN: ANCRAI; ISSN: 0003-4592
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

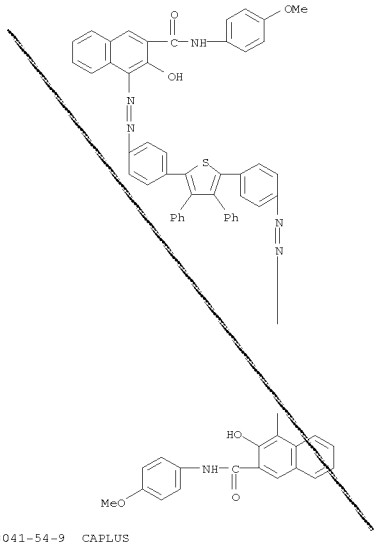
AB cf. CA 55, 9370f. Thionessal derivs. are prepared which are fast dyes for cotton, rayon, and nylon. 2,5-Bis(4-aminophenyl)-3,4-diphenylthiophene (I), 2-(4-aminophenyl)-3,4,5-triphenylthiophene 1,1-dioxide (II), and the 1,1-dioxide (III) of I were diazotized or tetrazotized and coupled with naphthalene derivs. [amine, coupler, m.p. (PHCl). λmaximum in mμ, and log ε in PhNO2 given]: I, 2-naphthol (IV), 267° (C6H6-EtOH), 520, 4.74; I, 2-naphthylamine, 255°, 500, 4.70; I, naphthol ACNA C (V), 324°, 572, 4.82; I, naphthol ACNA PC (VI), 239°, 570, 4.76; I, naphthol ACNA R (VII), 235° (xylene), 568, 4.76; I, naphthol ACNA F (VIII), 308°, 573, 4.78; III, IV, >330°, 537, 4.76; III, V, 275°, 565, 4.75; III, VI, 235°, 563, 4.75; III, VII, 224°, 563, 4.79; III, VIII, 254°, 565, 480; II, IV, 246°, 518, 4.45; II, V, 280°, 545, 4.53; II, VI, 246°, 543, 4.52; and II, VIII, 295°, 544, 4.52.

IT 108041-53-8P, 2-Naphth-p-anisidide, 4,4''-[(3,4-diphenyl-2,5-thiophenediyl)bis(p-phenyleneazo)]bis[3-hydroxy-(?) 108041-54-9P, 2-Naphth-p-anisidide, 4,4''-[(3,4-diphenyl-2,5-thiophenediyl)bis(p-phenyleneazo)]bis[3-hydroxy-(7), S,S-dioxide
RL: PREP (Preparation)
(preparation of)

RN 108041-53-8 CAPLUS
CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 248 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



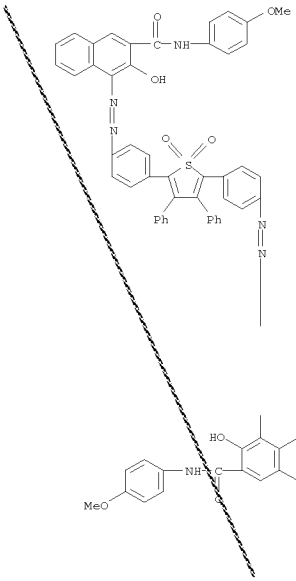
PAGE 2-A



RN 108041-54-9 CAPLUS
CN 2-Naphth-p-anisidide, 4,4''-[(3,4-diphenyl-2,5-thiophenediyl)bis(p-phenyleneazo)]bis[3-hydroxy-, S,S-dioxide (7CI) (CA INDEX NAME)

L19 ANSWER 248 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



L19 ANSWER 249 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1962:67385 CAPLUS
DOCUMENT NUMBER: 56:67385
ORIGINAL REFERENCE NO.: 56:13046h
TITLE: Ink for graphic reproduction containing a wetting element
INVENTOR(S): Boillet, Emile
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| IT 599682 | | 19591116 | IT | |
| PRIORITY APPLN. INFO.: | | | CH | 19571026 |

AB An ink is prepared, which is especially useful for offset printing, and eliminates a sep. wetting operation since it contains all necessary ingredients in a single product; i.e. a wetting agent, especially glycerol, a binder, a coloring material which is H2O-insol., and an emulsifier. Thus, a pigment 161 is mixed with glycerol 249, linseed-oil varnish 586, and triethanolamine 4 parts.

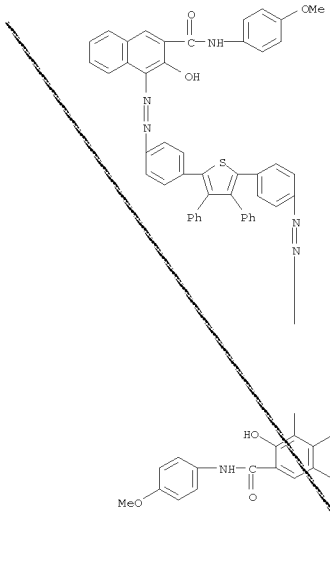
IT 108041-53-8
(Derived from data in the 7th Collective Formula Index (1962-1966))

RN 108041-53-8 CAPLUS

CN 2-Naphthalenecarboxamide, 4,4'-[(3,4-diphenyl-2,5-thiophenediyl)bis(4,1-phenyleneazo)]bis[3-hydroxy-N-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

L19 ANSWER 249 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 2-A



L19 ANSWER 250 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1939:11340 CAPLUS
DOCUMENT NUMBER: 33:11340
ORIGINAL REFERENCE NO.: 33:1724c-i,1725a
TITLE: Highly arylated compounds. VIII. Derivatives of tetraphenylthiophene. 2
AUTHOR(S): Dilthey, W.; Graef, Emmi
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1938), 151, 257-78
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB cf. C. A. 33, 579.3. Tetraphenylthiophene (I) (4. g.) and 1.5 g. KNO3 in 80 cc. AcOH, heated on a boiling water bath and treated (with shaking) with a little more than the calculated amount of H2SO4, give 60% of the 2-(4-nitrophenyl) derivative (II), yellow, m. 179-80°; oxidation gives p-O2NC6H4CO2H, thus showing the position of the NO2 group in the Ph nucleus. The position of the nitrophenyl group in I (i. e., α or β) cannot be determined directly but is inferred from the color reaction of the sulfones of the various derivs. with MeONa in C5H5N. Reduction of II with SnCl2 and gaseous HCl in AcOH gives the 2-(4-aminophenyl) derivative (III), m. 204-5°; the EtOH solution shows a blue fluorescence; concentrated H2SO4 gives an orange-yellow solution, changing to blue and (after 24 h.) to violet. The diazo solution from III with HClO4 gives α-4-tetraphenylthiophenediazonium perchlorate, golden yellow. III in C5H5N gives an Ac derivative, m. 258°, which gives a deep orange solution in concentrated H2SO4; with p-MeOC6H4CHO III yields the α-4-anisalamino derivative of I, pale yellow, m. 201°; the halochromy in concentrated H2SO4 is red-yellowish brown (unstable). II in sulfoacetic acid (from Ac2O and concentrated H2SO4 at 80°) with H2O2-Ac2O-AcOH gives the 1-dioxo derivative (IV), golden-yellow, m. 250°; this shows an intensive violet-red halochromy with MeONa in C5H5N. The production of the red color is dependent upon the presence of a NO2 and a SO2 group in the mole. The significance of this color reaction in relation to the constitution of these derivs. is discussed at some length. With O3 IV gives only BzOH and the p-NO2 derivative I (5 g.) in 100 cc. AcOH, treated on a boiling water bath during 1 h. with 10 cc. HNO3 and 10 cc. AcOH, gives a mixture of 60-5% of the α,α'-4,4'-di-NO2 derivative (V), m. 217-18°, and from the mother liquor 13-16% of the yellow α,β-4,4'-di-NO2 derivative (VI), m. 169-70°; oxidation gives only p-O2NC6H4CO2H. V is reduced by SnCl2 to 50-5% of the di-NH2 derivative, m. 273°; concentrated H2SO4 gives an orange-red color, changing quickly to pale yellow and (after 24 h.) to violet. Di-Ac derivative, m. 324-5°; di-Bz derivative, m. 320°; dianisal derivative, yellow, m. 243°. The diazo compound with β-C10H7OH gives a dark red compound, C48H32O2N4S, m. 267°; concentrated H2SO4 gives a dark blue color. H2O2 oxidizes V to the 1-dioxo derivative (VII), yellow, m. 294°; MeONa in C5H5N gives a red-violet color, stable to the addition of a little H2O but precipitating VII on addition of

L19 ANSWER 250 OF 250 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
excess of H2O; Et2O ppts. from the C5H5N soln. the compd. VII.MeONa. VI is reduced to the α,β-4,4'-di-NH2 deriv., m. 220°; H2SO4 gives a pale yellow-orange soln., changing through pale yellow to violet (24 h.). 1-Dioxo deriv. of VI, m. 194°; MeONa in C5H5N gives a violet-red color. I with fuming HNO3 at 0° yields a hexa-NO2 deriv., m. 284° (Fleischer, Ann. 144, 192(1867), believed this to be a tetra-NO2 deriv.). Nitration of II gives a mixt. of V and VI in about the same proportions as obtained from I. V with fuming HNO3 in AcOH
gives a small yield of a tetra-NO2 deriv., m. 302°. Nitration of the sulfone of I gives a small yield of IV. (p-O2NC6H4CH2)2S with H2O2 yields a sulfone, m. 259°; this gives a violet color with MeONa in C5H5N.

IT 860532-72-5P, Aniline, N-anisylidene-p-(3,4,5-triphenyl-2-thienyl)-
RL: PREP (Preparation)
(preparation of)

RN 860532-72-5 CAPLUS

CN Aniline, N-anisylidene-p-(3,4,5-triphenyl-2-thienyl)- (4CI) (CA INDEX NAME)